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ABSTRACT

Denmark has a wide range of basic vocational training courses that can be begun immediately after completion of lower secondary school, i.e., after students complete their compulsory education at the age of 15 or 16). This is not to say that there is no vocational education at the primary and secondary levels, where guest teachers from working life lecture students and where training and vocational guidance are provided beginning in the seventh grade. The upper secondary vocational training combines a basis year of training and apprenticeship. Besides basic vocational training, the Danish system offers updating and refresher training and further training (the latter being intended to extend vocational qualifications). Vocational education has been addressed by Danish law since the 1857 Freedom of Trade Act and the Apprenticeship Act of 1889. More recent vocational education-related legislation has clarified rights to joint ownership of firms' capital or profits and the provision of employment and training to unemployed persons. Besides the Ministry of Labour, unions and four levels of advisory bodies are also involved in administering vocational education. As in other countries, Denmark is currently in the process of reassessing the goals of its vocational education system in light of the country's current economic problems and the trend toward a global economy. (MN)

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Vocational training in Denmark

CEDEFOP

ED298307

CE 050 861

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Vocational training in Denmark

CEDEFOP

This study has been prepared by
Werner Rasmussen — Ministry of Education

on behalf of
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Dear Readers,

The best way of promoting cooperation among the Member States of the Community in the field of vocational training is by promoting understanding of the various training systems. CEDEFOP has deployed a large portion of its resources with a view to improving an exchange of such information, not only by publishing monographs such as this but also by organizing conferences and seminars, producing audiovisual material and publishing a series of studies and documentary dossiers.

This monograph is intended to serve as a frame of reference providing the reader with a maximum of information on many aspects of vocational training – the legislative framework, funding, historical development, etc. Our objective here is to present a "dynamic" description placing the questions encountered in the field of vocational training in their proper economic, social and cultural context within the Member State under review.

This monograph serves as a basic document for a wide range of activities at the Centre, for example the establishment of comparability between vocational qualifications or in-depth studies of certain important aspects in the development of initial and continuing vocational training.

The text of this description was prepared in consultation with the social partners, and we hope that we have thereby maintained a position of objectivity which respects the opinions expressed by all the parties involves, i.e. the representatives of the governments of the Member States and of the two sides of industry.

Our publications describing the vocational training systems in the various Member States are based on a single structure, an approach which facilitates the work of comparing and contrasting respective system elements wherever comparison is possible.

All the monographs are available in the original language and at least two other Community languages.

During the course of 1987 the Directorate of the Centre will develop proposals for a new version of the CEDEFOP Guide to take account of the fact, firstly, that training systems undergo a process of change and, secondly, that from 1 January 1986 the Community has two new Member States.

The Centre extends its thanks to the authors for their collaboration.

Ernst Piehl
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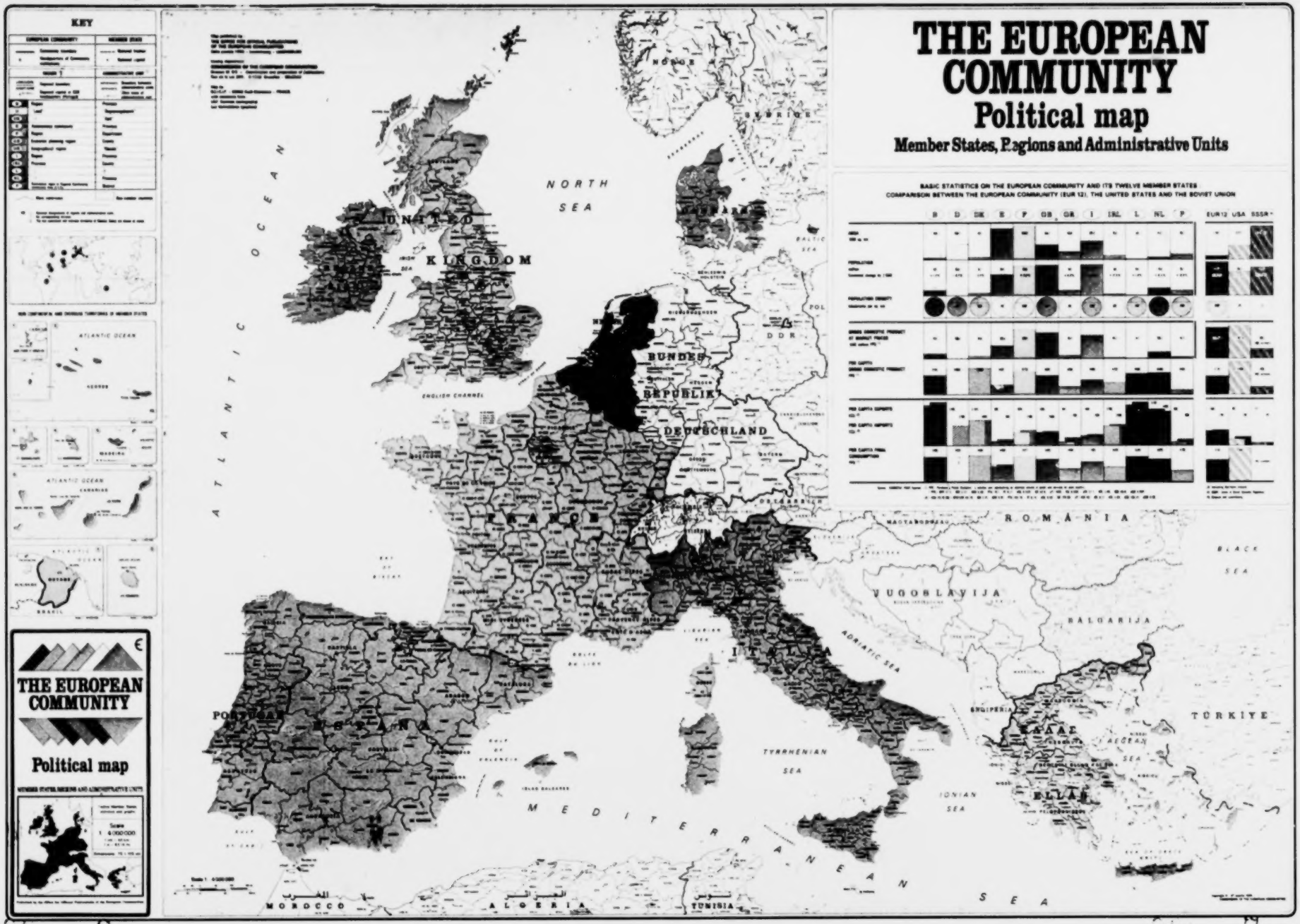
KEY
THE EUROPEAN COMMUNITY
Political map
THE EUROPEAN COMMUNITY
Political map
Member States, Regions and Administrative Units
BASIC STATISTICS ON THE EUROPEAN COMMUNITY AND ITS TWELVE MEMBER STATES
COMPARISON BETWEEN THE EUROPEAN COMMUNITY (EUR 12), THE UNITED STATES AND THE SOVIET UNION
B D DK E F GB GR I IRL L NL P EUR12 USA SSSR
NORTH SEA
ATLANTIC OCEAN
NORGE
SVERIGE
UNITED KINGDOM
IRISH SEA
ENGLISH CHANNEL
BALTIC SEA
POL
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BUNDES REPUBLIK DEUTSCHLAND
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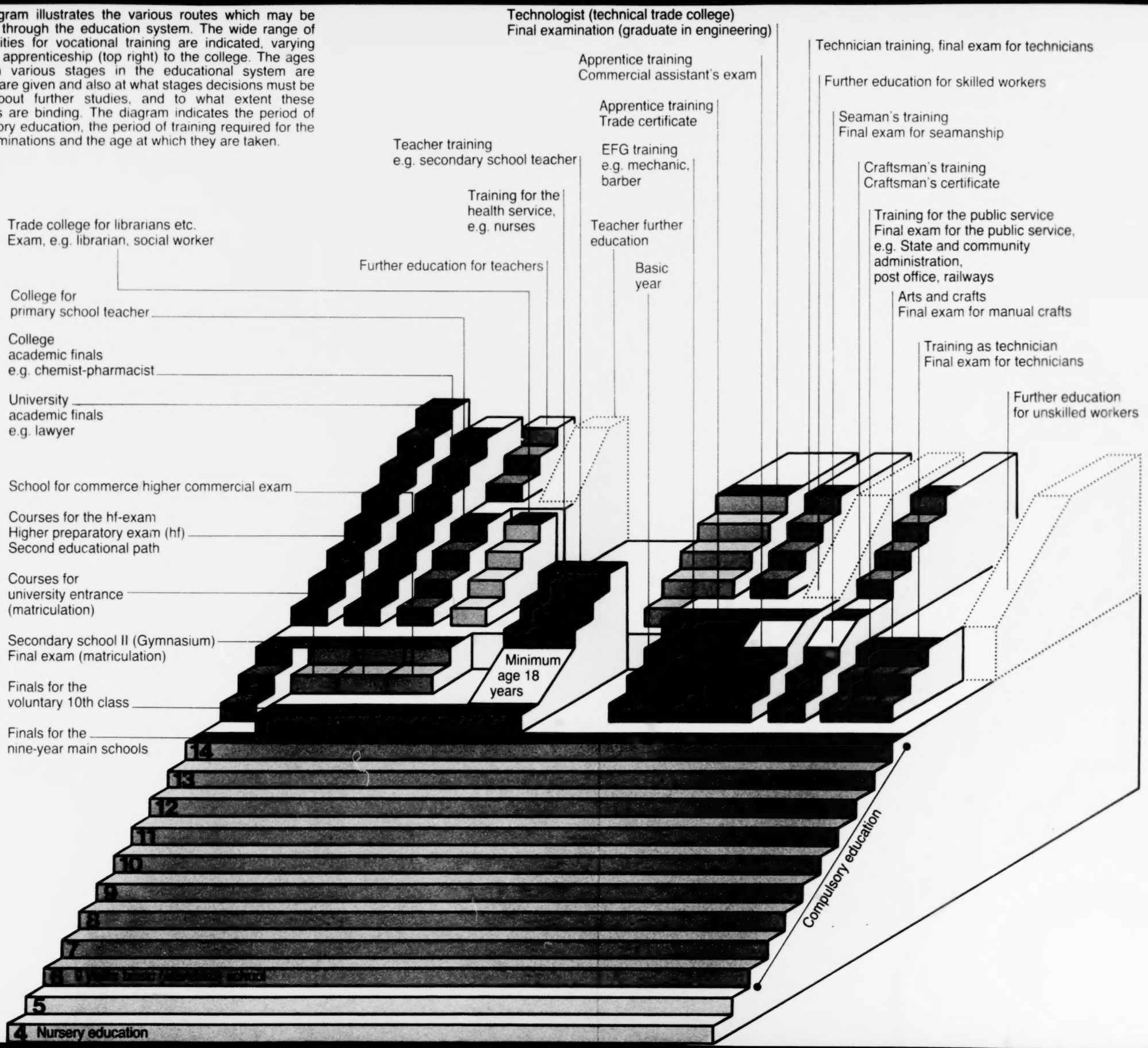
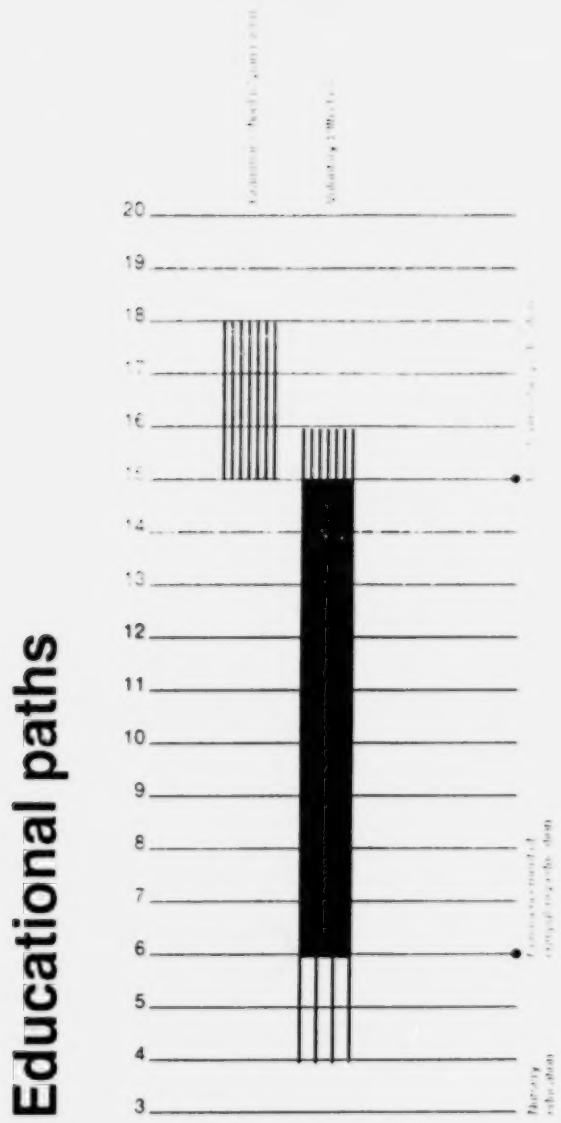
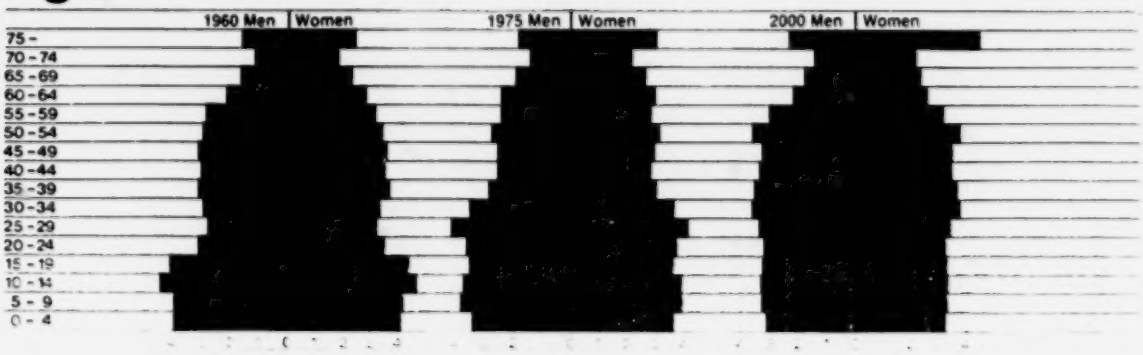
TÜRKIYE
MEDITERRANEAN SEA
MOROCCO
ALGERIA
TUNISIA
ATLANTIC OCEAN
MADEIRA
CANARIAS
BRASIL

This diagram illustrates the various routes which may be followed through the education system. The wide range of opportunities for vocational training are indicated, varying from the apprenticeship (top right) to the college. The ages at which various stages in the educational system are reached are given and also at what stages decisions must be made about further studies, and to what extent these decisions are binding. The diagram indicates the period of compulsory education, the period of training required for the final examinations and the age at which they are taken.





Age structure



Age profiles for the years 1960 and 1975 and a projection for the year 2000
(All over the age of 75 are included in one group)

The changes in the age diagrams show the sharp decline to be expected in the 5-14 age group as well as in the 15-19 age group.

The 14-24 age group on the other hand shows a substantial increase during the same period.

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FOREWORD

This study is the study from 1979, updated and expanded.

At the request of CEDEFOP, chapters have been added concerning

- updating and refresher training, and further training (chapter 4)
- administration (chapter 6)
- finance (chapter 7).

The manuscript was submitted in December 1985. It was then discussed with CEDEFOP's project leaders and the Danish representatives on CEDEFOP's Management Board, and also with the two directorates in Denmark which together cover the majority of the vocational training and labour market training courses and schemes in Denmark. A number of additions that have been requested have been provided, where possible.

A complete, Danish-language edition of the study, comprising approximately 300 pages, is available. Then there is the approximately 120-page abridgement of the study, which will form the basis for translations into other languages. The text, tables and figures which have been omitted are indicated in a special section of the list of contents to the present abridged version.

Chapter 1
THE KINGDOM OF DENMARK
- POPULATION - TRADES AND INDUSTRIES - WORK-FORCE, EMPLOYMENT AND UNEMPLOYMENT

1.1. The Kingdom of Denmark; the Danish national community.

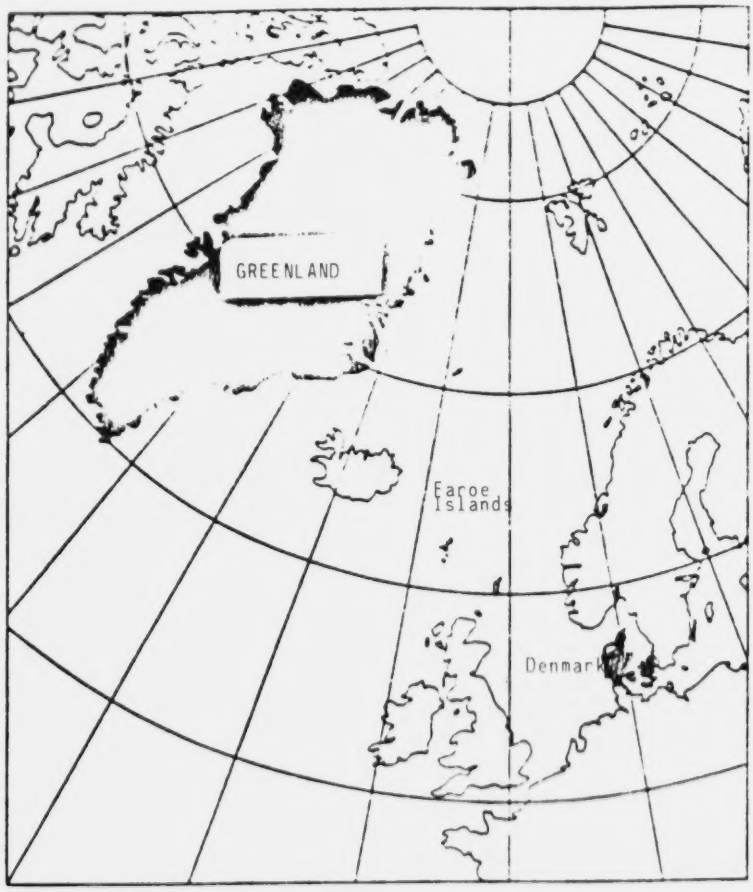


Fig. 1.7. The Danish national community

1.1.2.
The Kingdom of Denmark, the Danish national community, comprises the following.

(1) A southern part of the kingdom in Europe with the Jutland peninsula, which borders on Schleswig-Holstein in the Federal Republic of Germany, and also about 500 islands, about 100 of which are populated, the largest being Zealand, with the capital Copenhagen, and Funen. The population in 1984 was approx. 5.1 million and the area is 43 000 km^2.

(2) The vast Arctic island of Greenland, which is populated only along its coasts, the interior being permanent ice about 2000 metres thick. The population in 1984 was approx. 52 000 and the area is approx. 2 200 000 km^2.

(3) The Atlantic islands, the Faroe Islands. Population (1984) approx. 45 000; area approx. 1 400 km^2.

Denmark is a constitutional monarchy with a representative democracy. The Constitution (Basic Law) was first enacted in 1849; the present one dates from 1953. Parliament (Folketinget) consists of only one chamber with 179 members, 2 of whom are elected in Greenland and 2 in the Faroe Islands. The government is provided by the Folketing.

1.1.3.
Following a referendum on 2 October 1972, Denmark joined the EC with effect from 1 January 1973.

Both Greenland and the Faroe Islands have special arrangements for administration. For Greenland the Law concerning self-government (hjemmestyreloven) of November 1978 applies, which came into force on 1 May 1979. The Law contains a list of duties which can or must be assigned to the home administration for Greenland. Greenland's self-government is carried out by the Landsting (Parliament) and the Landsstyre (Administration). Greenland decided, by a referendum, to secede from the EC and this took place with effect from 1 February 1985. In accordance with this, a special so-called "OLT(overseas land and territories)-system" applies to Greenland, under which fishing vessels from EC member-States enjoy fishing rights in Greenland's waters.

For the Faroe Islands, the Law concerning self-government of 1948 applies, under which the Faroes are subject to Denmark with regard to foreign policy, Defence, the Church, police, aviation and the administration of justice. Home administration in the Faroes is carried out by the Lagting (Representative Council) and the Landsstyre (Administration).

This study concerns only matters relating to what is referred to above as "the southern part of the Kingdom".

Denmark joined the EC at the same time as Great Britain and Eire, with effect from 1 January 1973. A referendum was held in Denmark on 2 October 1972, resulting in a majority in favour of joining the EC, with 56.7 per cent of the votes for and 32.9 against. Under a law of 5 February 1986, it was laid down that a referendum should be held on 27 February 1986 concerning Denmark joining in the EC package (Single European Act). The referendum would not be held in the Faroe Islands or Greenland. 56.2 per cent of the votes were in favour and 43.8 per cent against; the result was thus approval of joining the EC-group.

1.2. Population

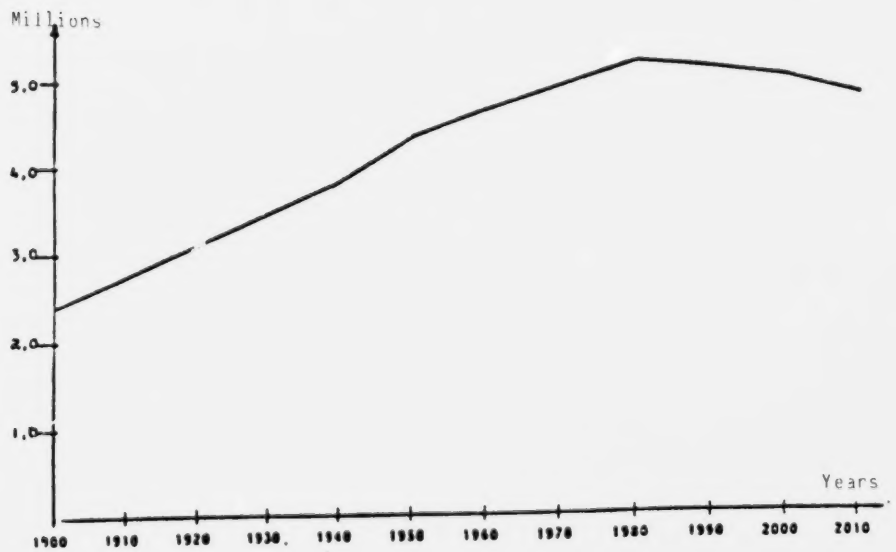
The population has increased fairly steadily, with an annual growth of approx. 1 per cent over a very long period, namely from around 1800 until about 1950. Thereafter, however, growth decreased and since 1980 there has been absolute decline instead. Table 1.1. shows population for selected years; the figures from 1985 to 2010 are from a projection carried out by the Danish Bureau of Statistics. In this forecast, fertility among the women and mortality are assumed to be as for 1981-82, and net immigration is assumed to exist.

Year	Millions	Year	Millions
1900	2.4	1980	5.121
1920	3.1	1985	5.106
1940	3.8	1990	5.068
1950	4.3	1995	5.019
1960	4.6	2000	4.951
1970	4.9	2005	4.856
1975	4.97	2010	4.731

Table 1.1. Denmark's population 1900-2010

The figures in the table are represented graphically in Fig. 1.8.

Fig. 1.8. Denmark's population 1900-2010



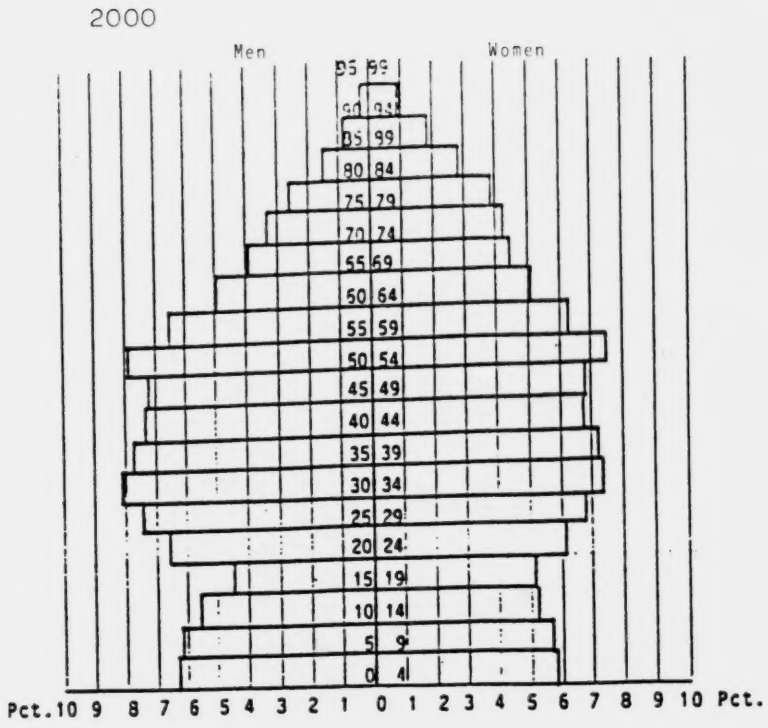


Fig. 1.8.c Distribution of population by age and sex, 2000

The age-pyramid for the year 2000 shows the smallness of the respective years for the age groups 0 - 25 years. The years for the age groups 40 - 60 years are relatively large. There are more men than women, relatively speaking, for the age groups up to 60 years; then there are more women in the age groups over 60 years.

Table 1.4. Immigration and emigration 1972-1982

IMMIGRATION AND
EMIGRATION, by nationality and sex

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Total immigrants	31 200	41 948	33 146	31 946	33 320	32 740	32 059	33 183	30 311	27 874	28 223
Danish nationals	13 520	17 219	15 237	18 528	18 832	16 977	16 098	15 134	14 526	14 513	15 285
Men	6 303	8 518	7 543	10 147	9 728	8 681	8 103	7 733	7 430	7 509	7 892
Women	7 217	8 701	7 694	8 381	8 904	8 296	7 995	7 351	7 096	7 004	7 393
Foreign nationals	17 680	24 729	17 909	13 418	14 488	15 763	15 961	18 049	15 785	13 361	12 938
Men	9 771	14 935	10 213	7 200	8 009	8 419	8 541	9 537	8 444	7 035	6 828
Women	7 909	9 794	7 696	6 218	6 679	7 344	7 420	8 512	7 341	6 326	6 142
Total emigrants	25 762	29 703	39 751	40 659	30 000	26 906	26 735	27 731	29 913	29 719	28 328
Danish nationals	13 688	17 186	25 592	25 861	17 460	15 424	15 796	16 397	17 979	18 650	17 931
Men	6 218	8 495	13 846	13 774	8 758	7 717	7 837	8 443	9 296	9 901	9 367
Women	7 470	8 691	11 746	12 087	8 702	7 707	7 959	7 954	8 683	8 849	8 624
Foreign nationals	12 074	12 517	14 159	14 798	12 540	11 482	10 939	11 334	11 934	11 069	10 397
Men	7 345	7 606	8 667	8 896	7 484	6 631	6 279	6 480	6 651	6 064	5 673
Women	4 729	4 911	5 492	5 902	5 056	4 851	4 660	4 854	5 283	5 005	4 864
Total net immigration	5 438	12 245	+8 605	+8 713	3 320	5 834	5 324	5 452	398	+1 845	+105
Danish nationals	+168	33	+10 355	+7 333	1 172	1 553	302	+1 263	+3 453	+4 137	+2 736
Men	85	23	+6 303	+3 627	970	964	266	+660	+1 866	+2 292	+1 375
Women	+253	10	+4 052	+3 706	202	589	36	+603	+1 587	+1 845	+1 361
Foreign nationals	5 606	12 212	3 750	+1 380	2 148	4 281	5 022	6 715	3 851	2 292	2 631
Men	2 426	7 329	1 546	+1 696	525	1 788	2 262	3 057	1 793	971	1 153
Women	3 180	4 883	2 204	316	1 623	2 493	2 760	3 658	2 058	1 321	1 478

(Excl. migration between Denmark and Greenland.)

Table 1.5. Number of persons (in '000) in a number of age groups relevant to planning 1970 - 2010

Italics are used when the age group originates wholly or partially from projected birth statistics.

Year	0-2 years	3-6 years	7-15 years	16-19 years	20-24 years	20-64 years	65-79 years	80 år +
1970	224	332	667	299	419	2.787	498	99
71	213	333	676	299	412	2.819	508	102
72	215	325	683	300	395	2.828	519	107
73	220	312	693	300	384	2.844	528	110
74	221	296	707	298	381	2.862	539	115
75	216	291	713	298	379	2.864	546	117
76	213	290	714	295	373	2.871	561	124
77	208	291	710	296	374	2.881	568	128
78	199	292	706	297	374	2.893	579	134
79	189	289	705	299	372	2.903	586	136
1980	183	281	700	308	372	2.915	592	142
81	178	271	690	315	372	2.929	596	146
82	169	262	677	324	371	2.937	597	150
83	163	249	661	334	374	2.954	599	156
84	157	241	646	335	382	2.972	602	160
85	*156*	232	634	327	391	2.993	601	164
86	*155*	223	625	314	400	3.001	607	167
87	*156*	214	613	297	412	3.028	611	171
88	*157*	*209*	595	292	416	3.045	611	175
89	*158*	*208*	574	293	408	3.055	611	179
1990	*159*	*208*	555	293	397	3.062	609	183
91	*159*	*209*	534	294	384	3.071	606	186
92	*159*	*210*	*515*	291	372	3.084	603	189
93	*159*	*211*	*501*	281	366	3.099	598	192
94	*158*	*212*	*491*	272	364	3.109	595	194
95	*158*	*212*	*482*	263	364	3.121	589	196
96	*156*	*212*	*475*	250	365	3.133	585	195
97	*155*	*212*	*471*	242	356	3.139	581	195
98	*153*	*211*	*470*	233	343	3.141	577	195
99	*151*	*209*	*471*	223	333	3.144	573	195
2000	*149*	*208*	*473*	215	322	3.142	571	194
01	*146*	*206*	*474*	*210*	307	3.128	564	197
02	*144*	*203*	*474*	*209*	295	3.128	561	198
03	*140*	*200*	*473*	*208*	285	3.117	561	197
04	*137*	*197*	*472*	*210*	274	3.102	562	197
05	*134*	*193*	*469*	*211*	*267*	*3.089*	563	197
06	*130*	*190*	*466*	*212*	*262*	*3.073*	566	196
07	*127*	*185*	*462*	*213*	*261*	*3.056*	571	194
08	*124*	*181*	*457*	*213*	*261*	*3.034*	583	193
09	*121*	*176*	*451*	*213*	*263*	*3.008*	598	191
2010	*119*	*172*	*444*	*212*	*264*	*2.978*	618	189

Primary and lower secondary school

The age group 7 - 15 years is relevant for planning and for determining the size of the primary school and lower secondary school. The peak was reached around the year 1975, with 715 000 persons in this group. Around 1996 there will be about 170 000 - or approx. 25 per cent - fewer in the age group. In addition to the overall decrease, there will be changes in the relative sizes, i.e. between the numbers of pupils at the various ages in the primary and lower secondary schools.

Training and the labour market

Here, the age groups 16 - 19 and 20 - 24 are of particular interest. The age group of 16 - 19-year-olds reached its peak in 1984, with 335 000 persons. In the remainder of the century, this age group will continue to decrease; around the year 2000 it will have fallen by about 120 000 persons, or approx. 35 per cent, and in the first decade of the next century it will be more or less constant.

The age group of 20 - 24-year-olds reached a peak at the beginning of the period, in 1970, after which it decreased down to a trough around 1980. Up to 1988 it is rising again, culminating at 416 000, after which a considerable decline

takes place - 150 000 persons up to the year 2005.

The bulk of the population supply for the work-force is recruited from these two age groups, and relief for the problem of youth unemployment can therefore be expected. However, the smaller supply to the labour market will cause some sluggishness, because it can become more difficult to adjust the work-force to the trend of economic activity.

Working age-groups

The age group 20 - 64 years forms the bulk of the gainfully employed age groups. By the year 2000 it will have increased by about 350 000 over the 1970-figure; but in the first decade of the next century a decline of approx. 165 000 will set in and the average age in the group will rise. Whereas the 20 - 39-year-olds represent today about 52 per cent of the working age groups, their proportion will have fallen to about 46 per cent in the year 2000 and to about 39 per cent in 2010. Since both occupational and geographical mobility are highest among young persons, this trend will reduce the mobility of the work-force.

1.3. Trades and industries

The information here applies only to the southern part of the national community, i.e. Jutland and the islands.

The main economic sectors

Agriculture, forestry, fishing and mining.

Agriculture was the main economic activity in Denmark in olden times and the majority of the population were connected with agriculture. Agriculture has undergone considerable development in Denmark, and it is still changing in its forms of production and operation, at the same time merging into larger farm units, since this allows more efficient operation.

In the 19th century and earlier, agriculture was based especially upon the cultivation of cereals; but cheap imports of grain at the end of the 19th century resulted in decisions being taken to change over to livestock production, using imported grain as fodder, together with investment in agricultural industry, with dairies, slaughterhouses, etc. The trend in more recent years is characterized by the improvement of crops and livestock and by mechanization and use of artificial fertilizer and plant protectants.

The trend in the number of farms in recent years has been as follows:

1960	196 000	agricultural production units
1974	130 000	" " "
1984	95 000	" " "

Most of the agricultural units exist as family-operated farms. In 1982 the number of agricultural workers and office-holders was about 40 000, distributed among about 15 000 farms.

The percentage area of land under agriculture is very high - approx. 66 per cent of the area of Denmark is under cultivation.

Forestry represents about 10 per cent of the area of Denmark. This is a higher percentage than around the year 1800, when the forested area was only about 4 per cent. The considerable increase is due to the "forest-reserve order" (fredsskovordninger) of 1805, which contained a prohibition of forest-clearing, and also to the planting of the large stretches of moorland in Jutland with fir-tree plantations. Forestry covers about one-half of the Danish consumption of timber. The number of wage-earners in 1984 was approx. 4 200.

Fishing is carried out from about 3 200 motor fishing vessels and the number of fishermen is approx. 11 000. Most of the catch is landed in ports on the coast of Jutland, namely Esbjerg, Hirtshals, Hvide Sande, Skagen, Thybor Island and Hanstholm.

Mining, etc. Denmark is poor in minerals and mining is therefore of only minor significance. However, the large deposits of limestone, gravel, clay and salt are very important. Drilling for oil and gas in the North Sea (Vesterhavet) has yielded such good results in recent years that Denmark is on the way to becoming self-sufficient in oil. Natural gas is being distributed all over the country via a widely ramified pipeline system, most of which will be ready in 1986. Natural gas is being used at present mostly for heating dwellings and as an energy source in trade and industry; but there will be an opportunity to develop petrochemical industry. The total labour force is about 19 000.

The secondary economic sectors

are composed of production units in craft trades, industry and building and construction. Craft trades have existed in Denmark for as long as the country has existed, whereas industry is a few hundred years old. Denmark is relatively poor in most raw materials, and industrial production is therefore based upon agricultural products and imported raw materials and semi-manufactured goods; industry is essentially a secondary or processing industry.

The total number of employed persons in 1982 was 621 000, of whom 160 000 were women.

The tertiary economic sectors

The tertiary economic sectors embrace transport, trade and services.

In November 1982 the numbers of employed were as follows:

	Number of persons	of whom women
Transport	176 000	42 000
Wholesaling	153 000	46 000
Retailing	207 000	110 000
Finance	182 000	86 000
Restaurant and hotel trade	53 000	33 000
Education	182 000	108 000
Health and social services	372 000	312 000
Other public services and administration	245 000	115 000
	1 695 000	913 000
S u m m a r y		
Primary economic sectors	210 000	53 000
Secondary economic sectors	621 000	160 000
Tertiary economic sectors	1 695 000	913 000
	2 526 000	1 126 000

Remarks

The primary economic sectors are the smallest area of employment, and on the whole they are still declining.

The secondary economic sectors are characterized by opposed influential tendencies. The effect of technological development is that productivity can continue to rise; at the same time, however, it means that competitiveness internationally can increase. This is important for Denmark's balance of payments and is accompanied by special efforts to win market shares on the export markets.

The tertiary economic sectors form the largest area of employment. They have given rise to serious concern and the situation has been discussed in several national planning reports, in which the necessity is pointed out for a slowing of growth in public services, i.e. both education, health and social services, and other public services and administration. The question is discussed also in Chapter 2 of the present report.

The employment rate for women is high, being around 70-80 per cent for the age groups 20-50 years, after which it is 63 per cent for women aged 50-54 years and 53 per cent in the 55-59-years age group. The high rate applies also to married women, and it means that married couples usually have two incomes for the household.

1.4. Work-force. Employment. Unemployment

1.4.1. The work-force

The composition of the population by age groups is reviewed above. The work-force consists mainly of persons aged betwen 16 and 70. Of these, only the younger ones are under training or in continuing education.

Each year, the Danish Bureau of Statistics compiles statistics on the work-force and its composition, including data on employment and unemployment. The Bureau uses for these several registers which are combined to give a very complete picture of the work-force. The most important sources are the data for Labour Market Supplementary Pensions and for the tax authorities. In addition, information on unemployment is provided through the registering of unemployed persons with the employment offices, the unemployment insurance funds and the social welfare authorities. All of these registration particulars are coded together and included in the published report.

Owing to the complicated coding work, compiling the complete report takes a relatively long time; however, the report is very complete. The latest one published is the statistics on the work-force as at 30 November 1983. It includes everyone who domiciled in Denmark on 1 January 1984. The information relates to the last week in November 1983. For

classification into job categories, the employed are defined as persons working on the labour market as self-employed persons, assisting spouses or wage-earners in the report-week. The unemployed are persons who, in the week concerned, were registered at the employment offices as completely jobless. The employed plus the unemployed constitute the work-force, other persons being placed in the "outside the work-force"-category.

Both persons in the work-force and persons outside it can be sub-divided into those who are or are not, respectively, seeking training at the same time. Persons seeking training are those who were enrolled on a qualifying training course on 1 October 1983.

For wage-earners, placement in employment is carried out on the basis of information concerning the trade or industry for the job in which the individual wage-earner was employed in the report-week. The Danish job classification-code used is based upon the UN job classification-code ISIC 1968.

Some of the main figures from these register-based work-force statistics as at 30 November 1983 are given below.

Table 1.6. Population, by sex and job

	1982	1983		
	Total	Total	Men	Women
Self-employed, total	267.070	262.427	215.499	46.928
Assisting spouses	61.878	59.741	486	59.255
Employed wage-earners, total	2.213.754	2.218.109	1.193.859	1.024.250
Of which:				
White-collar workers	1.144.203	1.136.971	534.038	602.933
Skilled workers	284.994	285.209	267.363	17.846
Unskilled workers	569.881	554.648	277.334	277.314
Unspecified	244.676	241.281	115.124	126.157
Unemployed	238.477	257.512	127.703	129.809
Work-force, total	2.781.179	2.797.789	1.537.547	1.260.242
Persons outside work-force, total	2.335.285	2.314.341	980.395	1.333.946
Of which:				
Seeking training, and children	1.185.015	1.158.695	580.606	578.089
Post-retirement salary-recipients	69.256	76.081	48.298	27.783
Pensioners	750.037	761.184	279.695	481.489
Others outside the work-force	330.977	318.381	71.796	246.585
Whole population	5.116.464	5.112.130	2.517.942	2.594.188

Table 1.7. Labour market-trend, 1976 - 1983

	Trend in the work-force, number employed and employment rates, etc. ('000 persons)					
	1976	1977	1978	1979	1981	1983
Whole population aged 15-74 years	3.673	3.691	3.712	3.768	3.784	3.821
of which, men	1.825	1.834	1.845	1.858	1.882	1.902
of which, women	1.848	1.857	1.867	1.880	1.902	1.919
Persons outside work-force	1.178	1.154	1.134	1.107	1.110	1.089
of which, men	343	345	345	372	397	411
of which, women	834	809	789	735	713	678
Persons in work-force	2.495	2.537	2.578	2.631	2.674	2.732
of which, men	1.481	1.489	1.500	1.487	1.486	1.491
of which, women	1.014	1.048	1.078	1.144	1.188	1.241
Employed in work-force	2.337	2.352	2.365	2.473	2.398	2.420
of which, men	1.394	1.400	1.398	1.424	1.337	1.332
of which, women	943	952	967	1.049	1.061	1.088
Unemployed in work-force	158	185	213	157	276	312
of which, men	87	89	101	62	149	159
of which, women	71	96	112	95	127	153
Employment rate[1]	67,9	68,7	69,5	70,4	70,7	71,5
of which, men	81,2	81,2	81,3	80.0	78,9	78,4
of which, women	54,9	56,4	57,8	60.9	62.5	64,7

1) The employment rate is the number of persons in the work-force as a percentage of the number of persons aged 15-74 years.

Note: The figures relate to a census date in April or May of the year concerned. The term "unemployment" as used in the report does not correspond to registered unemployment (CRAM), since it also includes unemployed persons who are not registered.

Remarks on table 1.7.

In the period covered by the table, 1976 - 1983, the total number of persons in the work-force rose by 237 000, the largest part of the increase being women, 227 000 of them, as against only 10 000 men.

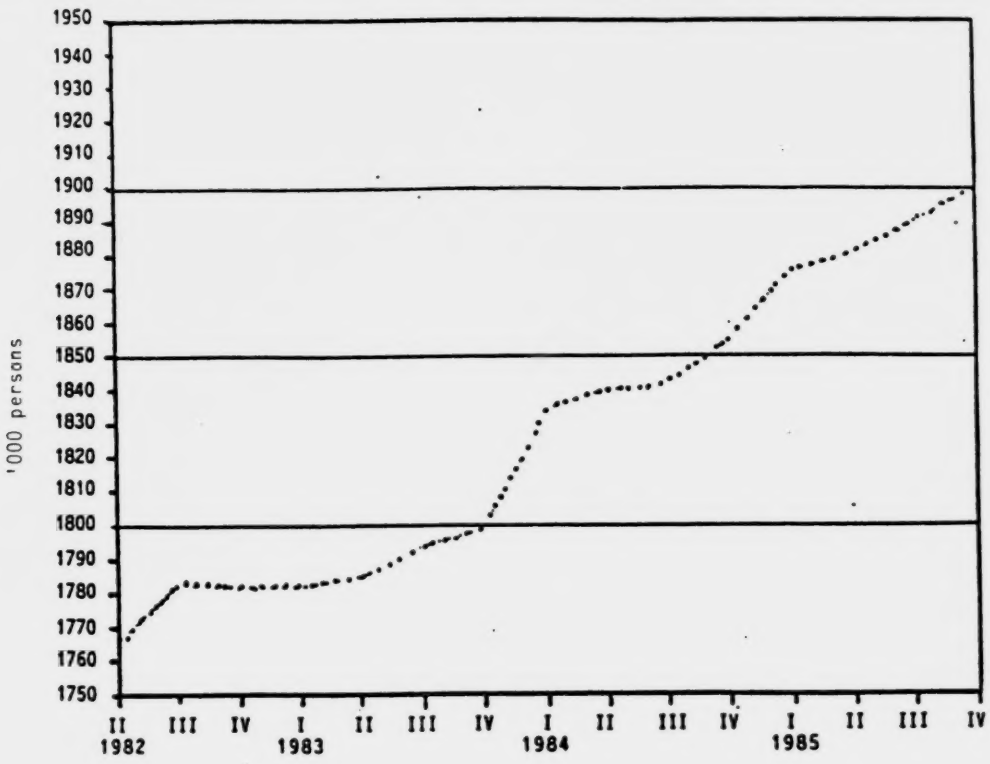
From 1976 to 1983 the number of employed in the work-force increased by 83 000; but this conceals a decrease of 62 000 among men and an increase of 155 000 among women.

Unemployment in the work-force increased from 158 000 to 312 000, i.e. by about 150 000. Total unemployment at the end of the period is about the same for men and women.

The employment rate fell slightly for men, whereas it rose by about 10 p.c. for women; but the employment rate is still higher for men than for women.

Table 1.7. ends at 1983; but the trend from 1983 to 1985 is illustrated in a publication from the Ministry of Labour. A graph from this publication is reproduced here, showing the seasonally-corrected employment among wage-earners in the years 1982 - 1985:

Seasonally-adjusted employment of wage-earners 1982-85



Note: Employment in the 1st and 2nd quarters of 1985 is adjusted with an estimated figure for the effect of the labour disputes upon the reported employment level. The employment level in the 3rd and 4th quarters is estimated, allowing for a total increase of 40-45 000 in employment in 1985.

Special interest is attached in these years to growth in the public and private sectors. This is connected with the fact that a change in employment policy took place after the Schlüter government came into power in the autumn of 1982. Since 1970 the work-force had grown by approx. 340 000, with most of the increase in the first part of the period. A fundamental reason for this was a considerable rise in the employment rate of women; but a dominant feature in this part of the period was a doubling of the number of persons employed in the public sector - up to 1982-83, and at the same time employment in the private trade and industry sector, with the exception of services, was falling. Up to the autumn of 1982, the economic policy had been to counteract increases in unemployment by growth in the public sector. The new policy was to prevent increasing employment in the public sector and to promote employment in the private sectors. The fact that this succeeded is demonstrated by the following table, which is based upon figures for ATP (Labour Market Supplementary Pensions) exploited by the Danish Bureau of Statistics:

	1st quarter 1983	1st quarter 1986	Change from 1st qtr.83 to 1st qtr.86
		'000 employed	
Private sectors,total	1 111.9	1 223.8	+ 111.9
Public sectors, total	616.5	622.4	+ 5.9
of which,central govt.	157.5	154.8	- 2.7
local govt.	459.0	467.6	+ 8.6

The above table is not absolutely clear-cut in the distinction between private and public sectors. For example, transport - which is assigned to the private sectors - includes railways, which are publicly operated. In addition, self-owned institutions - some of which have all of their expenses covered by public grants - are assigned to private services.

1.4.3. Unemployment

In the Labour Directorate (arbejdsdirektoratet) under the Ministry of Labour, a central register - the so-called "CRAM-register" - has been drawn up. In it are entered all persons covered by unemployment insurance and their periods of unemployment which entitle them to daily benefit. The register also contains information on unemployment affecting non-insured persons. At the end of 1983, CRAM contained particulars of a total of 2.3 million persons - i.e. the majority of persons in the work-force (cf. graph in table 1.7.).

Thus, members of the unemployment insurance fund who are entitled to daily benefit, members who are not entitled to daily benefit, and non-insured persons receiving social security benefit for which the recipients require to be registered as job-seekers with the employment office (AF), are registered as unemployed.

The trend in unemployment is seasonal. It is usual to make corrections for seasonal variations, which are large in Denmark, where unemployment is highest in the winter months and lowest in summer. Thus, in 1984 actual unemployment varied from about 330 000 in January to about 240 000 in July - a fluctuation of about 90 000.

Unemployment varies also with age and sex, and for women the level is generally one-and-a-half times that for men. In addition, unemployment is highest for the young age groups. For example, the seasonally-corrected figures for June 1985 were:

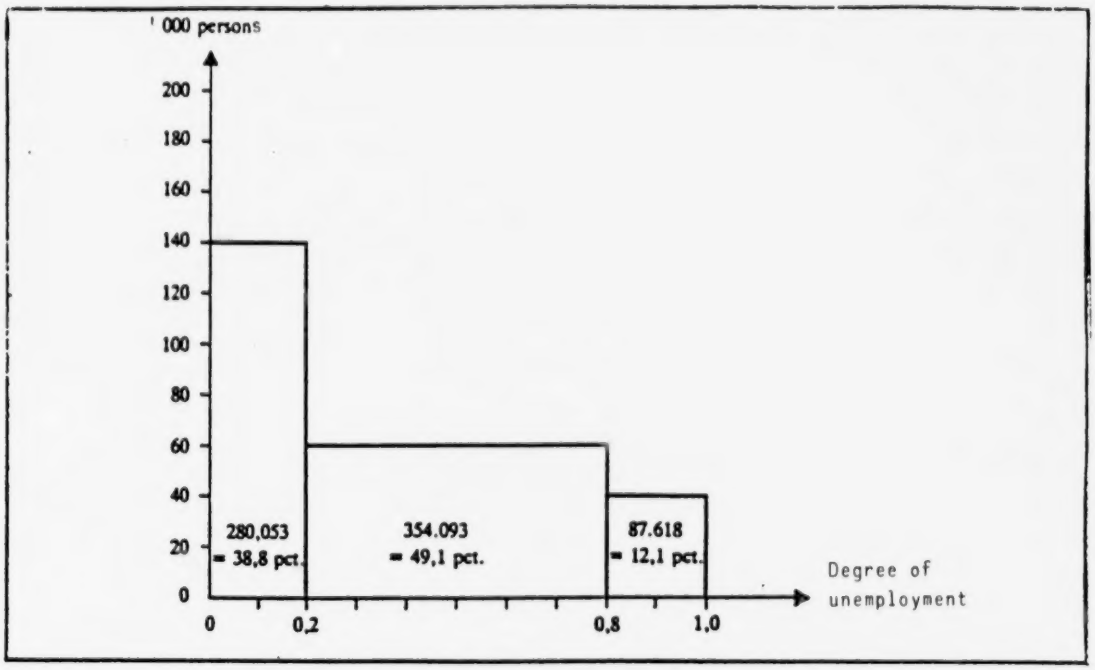
Total unemployment		9.3 p.c.
By sex:	Men	7.3 p.c.
	Women	11.7 p.c.
By age:	16 - 24 years	11.7 p.c.
	25 - 59 years	8.9 p.c.
	60 - 66 years	4.9 p.c.

1.4.3.4. Degree of unemployment

Detailed studies on the basis of CRAM have shown that very wide differences exist in the duration of unemployment for different persons. Moreover, it has been found that throughout the year a very considerable proportion of the work-force is affected by unemployment.

The first aspect - varying duration of unemployment - can be illustrated by curves of the degree of unemployment (Fig. 1.23.). In the course of a single year, 1982, 721 764 of the persons registered in CRAM were affected by unemployment; but the length of their period of unemployment varied widely. 280 051 or 38.8 p.c. of those affected by unemployment were jobless for up to 20 pc. of the year, while 354 093 persons or 49.1 p.c. of those affected were jobless for between 20 and 80 p.c. of the year. Finally, 87 618 or 12.1 p.c. of persons affected by unemployment were jobless for between 80 and 100 p.c. of the year. The first category were short-term unemployed, whereas the third category were long-term unemployed.

The returns are important as basic data for measures to combat unemployment. They are used by the authorities, firms and trade unions and also by the regional labour-market boards (arbejdsmarkednaevn). In Chapter 3 there is a discussion of the measures to combat youth unemployment and to provide training posts. In 1984, for example, the number of young persons affected by unemployment for a shorter or longer period was approx. 217 000. Of this number, a good half were unemployed for less than 4 months of the year (degree of unemployment less than 0.3) - i.e. short-term unemployed. It was an extremely complex category, statistically speaking - consisting of persons who were changing jobs, waiting to start a training course, awaiting a job after completing their training, or in a transition stage in some other form.



Note: The return of the number of persons affected by unemployment within a given period embraces all persons with a degree of unemployment in the period. Any given person appears only once in the return, even if the person concerned may have had several periods of unemployment before the period under consideration.

Fig. 1.23. Number of persons affected by unemployment in 1982, by degree of unemployment. A total of 721 764 persons were affected.

In the "heavy end" there were only about 15 000 youths(representing about 2 p.c. of all young persons registered as long-term unemployed, i.e. having a degree of unemployment higher than 0.8). The public campaign has been concentrated upon this category, in particular.

As already mentioned, in all age groups women are the harder hit by unemployment and this is why a special effort has been made to find ways of reducing this unemployment.

Chapter 2.The Danish economy

2.1. Budget deficit and national debt

The national budget has shown a deficit in recent years. A diagram from the Finance Minister's budget report is reproduced below, showing the trend since 1974 and a projection to 1988.

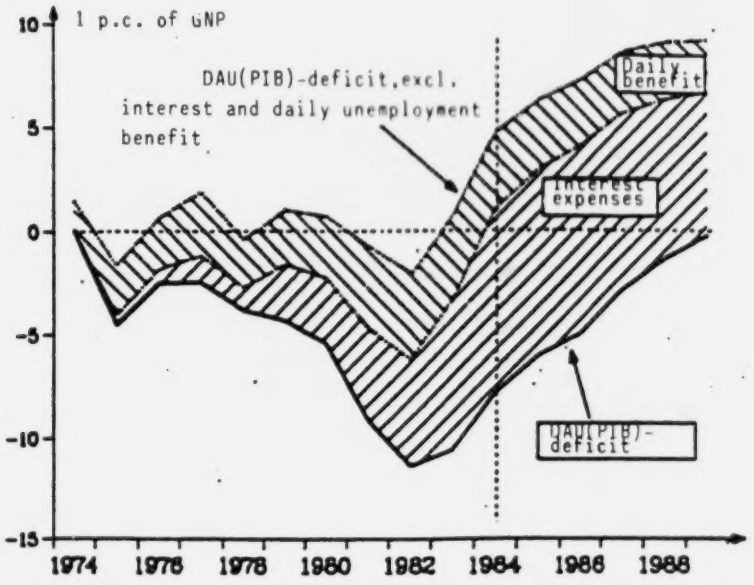


Fig. 2.1. National DAU-deficit as a percentage of GNP.

The deficit is shown as a percentage of the gross national product, GNP. This is the so-called "DAU-deficit", i.e. the deficit on the production, investment and borrowing (PIB) budget

(drifts-, anlaegs- og udlånsbudgettet). That the deficit has been increasing so sharply since 1974 is connected with the fact that Denmark's economy has been hit hard by considerable price increases on imports of oil and oil products. In addition, however, the national deficit has grown, owing to the rising costs of interest on growing indebtedness. Interest costs are shown separately in the diagram. Moreover, the costs of daily unemployment benefit payments are a substantial contributory cause of the budget deficit; these costs, too, are shown in the diagram. The Government refunds 90 p.c. of the benefit payments to unemployed persons.

In the figure, it is anticipated that the deficit may be down to zero at the end of 1988. It now looks as if a balance will be achieved as early as in 1986. But even if a balance is achieved, a heavy burden will continue to exist in reducing indebtedness, in interest and repayment of principal.

The means used to reverse the trend have been as follows:

- slowing of growth in the public sector and in free public disbursements (unemployment and social security benefit);
- strengthening the competitiveness of businesses;
- increasing total saving;
- growth of those sectors which can produce an export surplus or reduce imports.

The recession became serious when the prices of oil products rose very sharply. Denmark has succeeded in exploiting oilfields in the North Sea, enabling a reduction in imports to take place. Gas has been discovered also, and expansion has been carried out, with a distribution network for natural gas.

Another tough balancing-problem exists in connection with the balance of payments with other countries. Owing to our large external debt, this is a long-term problem. Denmark's balance of capital transactions with other countries as at 31 December 1984 was thus:

Assets	Liabilities
200 000m kr.	418 000m kr.

The heavy indebtedness constitutes a risk. Should there be disturbance in foreign exchanges, Danish bonds abroad may be offered for sale and loans in foreign currency may be called in. Moreover, indebtedness in foreign currency represents part of the large annual burden of interest (Fig. 2.1.). The ideal situation would be if assets substantially exceeded liabilities.

The above-mentioned situation regarding foreign exchange results from considerable deficit on the balance of payments over about 25 years. The percentages of the national product represented by the deficit have been as follows:

	Annually	Overall
1960-73	1.8	23.4
1974-83	3.4	34.0
		57.4

If the situation is to be reversed, there must be a surplus on the balance of payments over a very long period of years. The following is an estimate of the desirable trend:

	Assets in per cent of GNP	Liabilities in per cent of GNP
1979	26	53
1984	34	73
1990	34	90
2000	55	80
2010	60	40

In order to achieve the improvement as outlined above, exports of goods and services must substantially exceed imports. The actual trend of these values was as follows:

	Exports	Imports
1974	32	34
1979	29	32
1984	36	36

A balance was thus virtually achieved in 1984. If we assume an improvement up to 1990 which is sufficiently large for the trade surplus to cover the interest on external debt plus aid for developing countries and similar outgoings, the balance of payments should then be in balance. However, in order to achieve the additional improvement which can bring assets abroad by the year 2010 up to the 60 p.c. in the above estimate and the liabilities down to 40 p.c., a considerable trade surplus is required in the 20 years from 1990 to 2010 - something of the order of 6 p.c. of the national product.

The problem is very difficult to solve. It is not certain, as a matter of course, that the problem can be solved by stringent financial policy without unemployment increasing. It may be preferable to have very gradual wage increases, with business becoming more export-orientated at the same time, and this can only succeed if the political situation allows such a policy over a fairly long period of years.

2.3. The political situation

In September 1982, the minority government led by the Social Democrats was replaced by a non-socialistic minority

government which is a coalition between four parties:

The Conservative Party
The Liberal Party
The Centre Democrats
The Christian Democratic Party

This government is led by the Conservative Prime Minister, Poul Schlüter. The aim of its policy is to bring the balance of payments and the national budget back into balance through greater competitiveness and restraint on wages. The four parties do not have a majority in the Lower House of Parliament and must therefore seek support from one or more other parties. This support has been provided in most cases by the the Social-Liberal Party - which did not wish to join the government, however.

In the voting in December 1983 on the 1984 Budget, the Social Democrats and several of the other opposition parties voted against, after which the matter went to the country, and following the general election in January 1984 the Schlüter-government continued in office. It does not have a majority in the Lower House after the election, either, but has to seek support from other parties - still primarily the Social-Liberal Party.

The Schlüter-government - which had Henning Christophersen as Minister of Finance until he became a member of the EC Commission - decided to declare itself in favour of a fixed exchange rate for the Danish krone, whereas the preceding Social Democratic government had used devaluation of the krone several times - and with the support of the economic experts - in order to strengthen the competitiveness of businesses on the export markets. A consequence of the repeated devaluations, however, was that the rate of interest rose very sharply, because foreign lenders wanted to protect themselves against the effects of the devaluations. The high interest rate is of significance for competitiveness also. Because the non-socialist government announced that it did not wish to have recourse to devaluation, and adhered in practice to this policy, the trend was reversed and the rate of interest fell by about one-half.

In the years in which the Schlüter-government has had the political leadership, fundamental changes in the following respects have taken place:

- the national budget deficit has been reduced and in 1986 and 1987 a balance is expected - but debt service will necessitate many years with a budget surplus;
- the level of interest, which had reached 22-23 p.c. for bonds, has fallen to 10-12 p.c.;
- the adjustment of wages to the high cost of living has been suspended and the rate of increase of wages has been reduced;
- growth in the public sector has been slowed;
- employment in the private sector has increased;
- a tax reform has been carried out by means of legislation which comes into force as from January 1987;
- legislation has been carried out which will reduce the high governmental expenditure on unemployment benefits.

The external balance of payments has not yet been brought into balance and external debt is still growing.

It seems that the political situation will remain stable for a long time.

Chapter 3. EDUCATION AND VOCATIONAL TRAINING

3.1. The complete system of education and training

The complete system of education and training consists of the primary and the lower secondary school, which provide the 9 years of compulsory education from 6/7 years of age to 15/16 years, followed by further general education in the general upper-secondary courses up to the age of 18 - 20 years. Parallel with the general upper-secondary courses there are a wide range of basic vocational training courses which can be commenced immediately after lower secondary school - partly apprentice training courses and partly initial training courses. In line with the basic vocational training courses, a number of training courses are provided for the purpose of preparing young persons for the vocational training courses.

In addition, there are a number of training courses called "continuing training" and grouped according to duration as

- short further training courses (KVU)
- medium further training courses (MVU)
- long further training courses (LVU).

The courses in the KVU-category are typically of two years' duration, with a maximum of three years.

The courses in the MVU-category are typically of from three to four years' duration.

The courses in the LVU-category are typically of four or more years' duration.

The above-mentioned training courses are entered in the diagram, Fig. 3.1., in accordance with the classification used by the Danish Bureau of Statistics and the Ministry of Education.

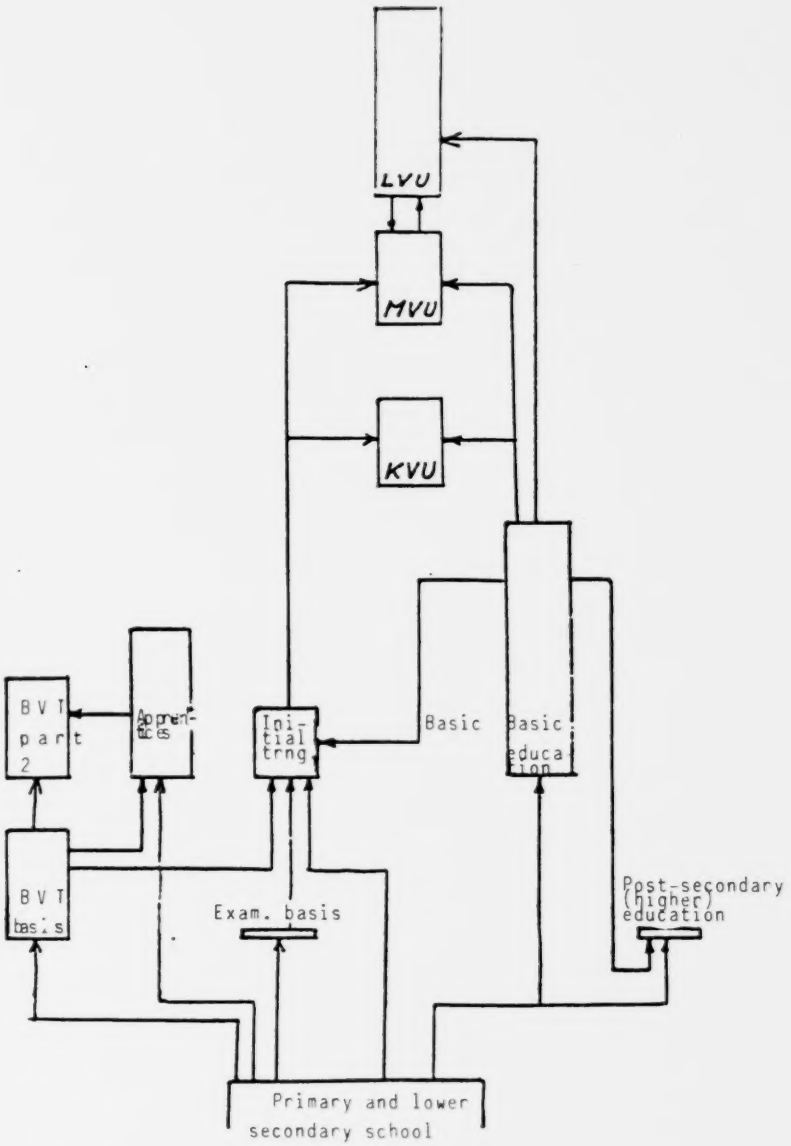


Fig.3.1. The complete system of education and training.

Explanation of Fig. 3.1.

Primary and lower secondary school end with the 9th form. The opportunity exists to continue in the 10th form, and about 60 p.c. of pupils in the years 1983-85 did so. As an alternative to the oldest forms in the lower secondary school, i.e. the 8th - 10th forms, the pupils can take courses at continuation schools, which are privately-owned institutions receiving grants from the central and local governments. The primary and lower secondary schools are organized either as a local authority school or as a private school*) receiving public grants. The primary and lower secondary schools have no examinations for the first 7 forms. Examinations are held in the oldest forms and the education ends with the lower secondary school-leaving examinations. In addition, the school provides a declaration of the suitability of the pupil for admission to the 3-year upper secondary school.

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*) On 1 September 1984 there were 224 private schools with 50 916 pupils. Of the total number of schools, 2 003, private schools represented 11.2 p.c. Of the total number of pupils, 646 810, there were 50 916 or 7.9 p.c. in private schools.

The general upper-secondary school courses are either the 3-year upper secondary school or the 2-year course for the higher preparatory examination, HF, or the 2-year course leading to the upper secondary school-leaving examination or the admission course to technical colleges. In addition, there are the so-called "supplementary upper secondary school-courses" which provide individual subject-instruction in higher preparatory (HF)-subjects.

The basic initial (efg) training and the 2-part initial training and also the apprentice training courses will be discussed in more detail later in this chapter.

Basic examination courses are certain vocational training courses which end with an examination. They are domestic science courses, agricultural courses and courses on marine transport.

Basic examination courses are discussed in more detail in sub-section 3.3.4. and in chapter 4, in which some of the short further training courses are discussed also.

Medium further training courses are: teacher training courses, courses in the Arts, training courses in sociology, technical training courses and health training courses.

Long further training courses are: teacher training courses, courses in the Arts and in theology, music and aesthetics training courses, sociology training courses, natural science courses, technical courses, courses in agriculture and health training courses. They are held primarily at universities or specialized advanced training institutions.

College courses are held at the so-called "county colleges" or are courses arranged by the various popular-education associations.

In the Danish education and training system the aim is to provide as much flexibility as possible, so that the individual can move as freely as possible within the system, and to ensure that the first training option selected does not stand in the way of subsequent changes or additional choices. The numerous supplementary courses which exist as part of the training system as a whole serve this purpose. The supplementary courses can be based upon general subjects; but there can also be workshop courses which provide practical instruction, which are necessary for some of the technician training courses.

See sub-section 3.2., "Training statistics", in which the same chart of the system appears, indicating with arrows and transfer frequencies the many streams which exist within the complete network.

3.1.1. Training-guidance and practical work experience at school

Education in the primary and lower secondary schools takes place in accordance with the latest legislation, which dates from 1975. Under this law, guidance-booklets are issued by the Ministry of Education concerning the forms of work in the various subjects and activity areas in the primary and lower secondary schools.

Training and vocational guidance are thus dealt with in guidance-booklet No.19, issued in 1976, in which the purposes of the activity and forms of work are laid down. It is compulsory for the school to give this guidance in the 7th to the 9th forms and it can be continued in the optional 10th form.

The following summary of forms of instruction and work is given in the guide:

- Reading and study of information and guidance literature, exercises and talks on the basis of this.
- Visits to classes in older forms or in other types of schools and training courses, and also visits to workplaces.
- Prepared questioning, in class, of invited teachers, pupils, representatives from working life, careers advisers, vocational counsellors, etc.
- Preparation and follow-up of study visits, practical work experience, courses in other types of schools, etc.
- Discussion of films, video tapes, radio and TV programmes, articles, etc.

After this, the guide contains a detailed description of possible procedures for each form of work.

Activities which are carried out in collaboration with the local community are thus included to a considerable extent.

Regarding instruction by guest teachers from working life, in the school year 1984/85 a total of about 7 000 visits were made by these teachers, assigned by organizations on the labour market.

The number of study visits to firms is estimated to be about 200 000 annually. In addition, about 120 000 on-job training periods with firms are arranged annually.

At national level, the work of the primary and lower secondary schools on guidance-projects is supported by the Council for training and vocational guidance (RUE), whose members are appointed as representatives of school and working life. RUE issues publications which are used by the school and by the public training-guidance services connected with the Labour Directorate and the employment offices.

As already mentioned, RUE operates on a national basis. With effect from 1 April 1986, reorganization of regional co-operation between the employment service and the labour-market participants has been taking place, concerning the conduct of training and vocational guidance.

A committee is appointed for each region in the country, to co-ordinate the regional vocational guidance-activity concerning training, occupational and labour-market conditions. The purpose of this new arrangement is to ensure that the guidance activity is unified for both those seeking guidance and the counsellors and authorities who participate in the work of guidance. At the same time, guidance and training and employment opportunities must be interrelated, in order to enable both the needs of the labour market and the wishes of those seeking employment to be met. The tasks for the various regional committees consist of:

- provision of information, etc.;
- courses for vocational counsellors and careers advisers;
- meetings arranged for those seeking guidance;
- co-operation and task assignment between authorities, etc.;
- provision of resources for regional co-ordination of guidance activity.

The regional employment service takes care of the administrative office work for the regional committee and for the committees appointed under it.

The subject "Work studies"

Thus, whereas training and vocational guidance are closely connected with the local community and are intended to assist the individual pupil to choose his training and employment, the subject work studies is of a more generally informative nature. It is stated in the guide issued by the Ministry of Education, regarding the subject of work studies, that the purpose of the instruction given in this subject is that the pupils should acquire knowledge and have practical experience which increases their knowledge of working life and social life, including that of the training opportunities which can lead to gainful employment. Within the subject, the following topics are studied:

- tasks of work
- co-operation and management
- finance
- training conditions
- environmental conditions
- the firm and the community.

Unlike training and vocational guidance, the subject work studies is not compulsory; it comes under the category of optional subjects - i.e. under the subjects which can be

offered to pupils in the 8th to 10th forms. There should not normally be less than 2 lessons a week in the school time-table.

3.1.2. Co-operation with labour market-participants and the employment service on training and vocational guidance

The above sub-section 3.1.1. deals with training and vocational guidance in the lower secondary school. However, guidance continues to be given for persons who have left lower secondary school, and the combatting of unemployment has high priority in this connection. These tasks likewise belong under employment service and are performed in co-operation with the labour market-participants and the representatives of the training institutions.

A reform was carried out recently which came into force on 1 April 1986. A committee is now appointed for each region, to co-ordinate regional guidance on training, occupational and labour market-conditions. The purpose is to ensure that guidance is provided in a unified way, for both those seeking guidance and for the counsellors and authorities who have tasks in the counselling work.

The Labour Directorate described the new arrangement in a circular dated 30 December 1985. The regional employment service takes care of the administrative office work for the committees.

3.1.3. More employment opportunities for women

Part of the Government's policy is to try to get more girls and women into work. There are several reasons for this. The younger women have already been trying in the last few decades to enter the labour market in greater numbers than hitherto, and this has created a distorted age distribution in a number of occupations which have traditionally been sought by women. At the same time there is an increasing need for more women in a number of occupations traditionally sought by men. During 1984, several proposals for a strategy, or a range of strategies, were worked out for this purpose. The strategic recommendation as a whole was sent to the Lower House of Parliament by the Minister of Education in June 1985 and was published at the same time. The main points are as follows:

1) Information on the consequences of continuing with traditional choices of training and occupations.

2) Introduction of computer science with use of edp at all levels of education and training, starting with the primary and lower secondary schools.
3) Updating of teaching in physics and natural science.
4) Experience of non-traditional occupations and training by means of special induction courses.
5) An experimental scheme in 1986, with larger grants-in-aid for apprentice and on-job training posts for girls in the basic metal industries and in building and construction.
6) Provision of a system of supplementary courses and special integration procedures for girls, in order to remedy "wrong choices".
7) New training courses and systems which enable combinations of "hard" and "soft" training elements in the upper secondary school, vocational training courses and further training courses.
8) Research and development work with a view to providing information on practical procedures and formulating new, more suitable procedures.

3.1.4. Co-ordinated applications. Regulation of admission

The Ministry of Education has statutory authority to lay down rules for admission to the respective schools which provide education at upper secondary school and equivalent level - basic vocational training (bvt), for example. A scheme has been devised for co-ordinated applications at national level, with all applications for admission submitted initially to one and the same address.

Thus, all persons wishing to be admitted in the autumn of 1986 to bvt-training courses, upper secondary schools and instruction for the higher preparatory examination, must submit an application before 20 Februrary 1986, expressing a desire to be admitted with priority in the order. Allocation of places is then made in accordance with detailed regulations which are intended to meet as far as possible the primary or alternative choices expressed.

3.2. Training statistics

In the years since 1974, the Danish Bureau of Statistics has been drawing up a training register of all persons aged 14-24 years, which contains particulars, updated annually, of placement in the training system at a given time (October each year) and movement through the system year by year,

over the 10 years during which persons are kept in the training register. Registration is an individual statistic, in which the individual person is identified by his name and personal identity number, the CPR-number which everyone has from birth until death. CPR stands for the Danish "centrale person-register", which is kept by the Danish Bureau of Statistics in collaboration with the 275 local-authorities and their registers of persons which are kept over the country as a whole, also called "national registers".

The training register is thus a complete record and is not based upon random samples.

The particulars of the person's placement in the training system comes from the training institution-register, which covers all schools at levels higher than or equal to that of the 8th form in the lower secondary school, vocational schools, county colleges, institutions for further education and universities, totalling approx. 4 000 institutions. Each is identified by its institution number, which consists of a code for the local authority and a serial number, and also particulars of the institution's name, address, type, etc.

The training courses and their progress are entered in the so-called training register, which embraces about 1 200 training courses or programmes. Each course (each programme) has a number and a name and particulars of levels, subject-area and duration. For the longer training programmes the register contains a description of the system's stages, departments and leaving-examinations.

The institution register and the training register together form a grid as shown in the following chart:

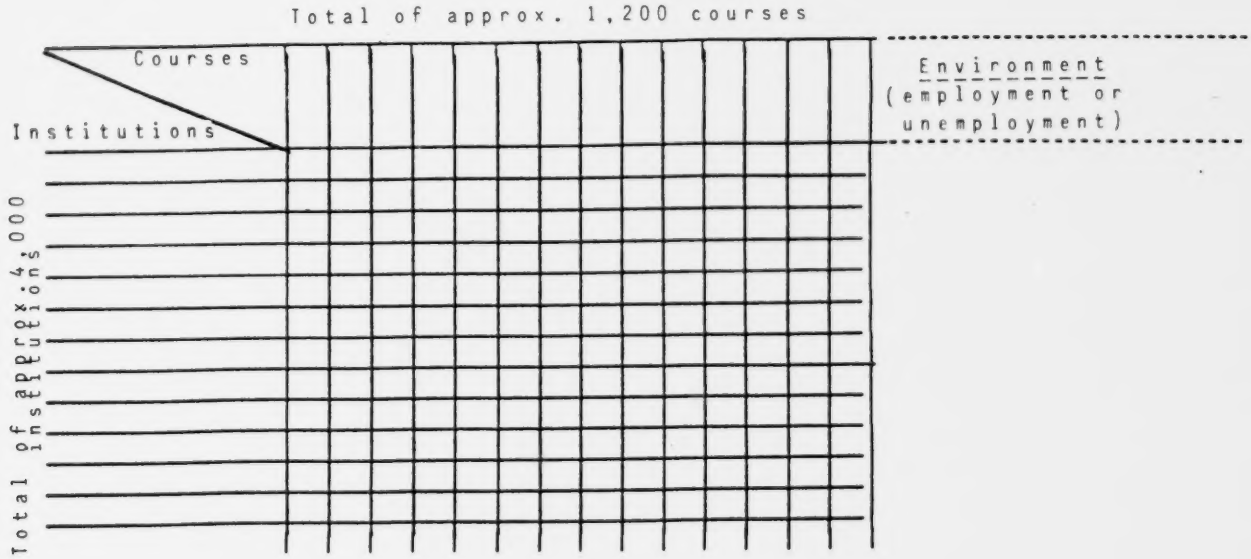


Fig.3.2. Chart showing grid of institutions and training courses

The grid consists of approx. 4 000 x 1 200 = 4.8 million "boxes" or compartments. The area on the extreme right is marked "outside world" (i.e. employment or unemployment).

The Danish Bureau of Statistics issues forms for making returns each year, to all of the above-mentioned institutions, for recording movements within the grid which every single person has made during the past year. Student-movements within a given period can assume 7 different forms, as follows:

1. The student can remain in the same box and only change his form and department within the training system.
2. The student can leave for the outside world (horizontally out of the system) or enter from the outside world (vertically into the system).
3. The student can change training and institution (diagonally within the system).
4. The student can change training within a given institution (horizontally within the system).
5. The student can change institution, but keep the same training (vertically within the system).
6. The student can resume his training at the previous institution, after a break ("leave").
7. The student can make movements combining the above 6 movements - multi-stage movements.

The returns, totalling about 800 000 annually, are used to make up 5 annual sub-registers, which are then combined in the integrated student register. The 5 sub-registers are as follows:

1. Schools and courses embracing students in the 8th to 10th forms of the lower secondary school, in upper secondary schools and on basic school or higher preparatory courses, or courses leading to the upper secondary school-leaving examination.
   This register receives about 350 000 returns annually.

2. Free schools embracing students at continuation schools, domestic science schools, agricultural schools, nautical training schools, county colleges, etc.
   The register receives about 40 000 returns annually.

3. Vocational schools embracing students at commercial schools, technical schools, engineer training schools, navigation schools, nurse training schools, training schools for nursery school teachers and recreation leaders, etc.
   The register receives 250 000 returns annually.

4. Further training institutions embracing universities and higher institutions for further education, teacher training colleges, etc.
   The register receives a total of 150 000 returns annually.

5. County-authority single-subject courses, which return about 40 000 students attending preparatory single-subject courses at lower secondary school or at the higher preparatory (HF) level.

In the integrated student register, particulars are contained for each student of the course attended, the duration of attendance on the course(s) and whether or not the course(s) was completed.

The integrated student register covers a good 10 schooling or training years, i.e. approx. 1.1 million persons. Analyzing and exploiting the returns takes about one year, from the date of the return to publication. A substantial part of the publication consists of tables of existing numbers, intake and departures within the various courses.

In order to provide an overview of the myriad movements in the grid, the courses are combined into 11 main categories, defined as follows:

- Years 8 - 10 of the lower secondary school
- General upper secondary school courses
- Basic vocational training courses
- Basic courses leading to examinations, etc.
- 2-part basic vocational training courses
- Apprentice training courses
- Examination foundation courses, etc.
- Short further training courses (KVU)
- Medium further training courses (MVU)
- Long further training courses (LVU)
- Training courses with no levels (college courses, etc.)

The movements are transfers from one main category to another. The flow of movements forms a transfer pattern, which can be characterized quantitatively by a set of transfer rates, each of which is the percentage of a school or college year which moves from one main category to another. The overall transfer pattern is usually calculated from one particular year's movements; but it can be adjusted for abnormal movements. The rule is that 100 represents the number of lower secondary school-leavers.

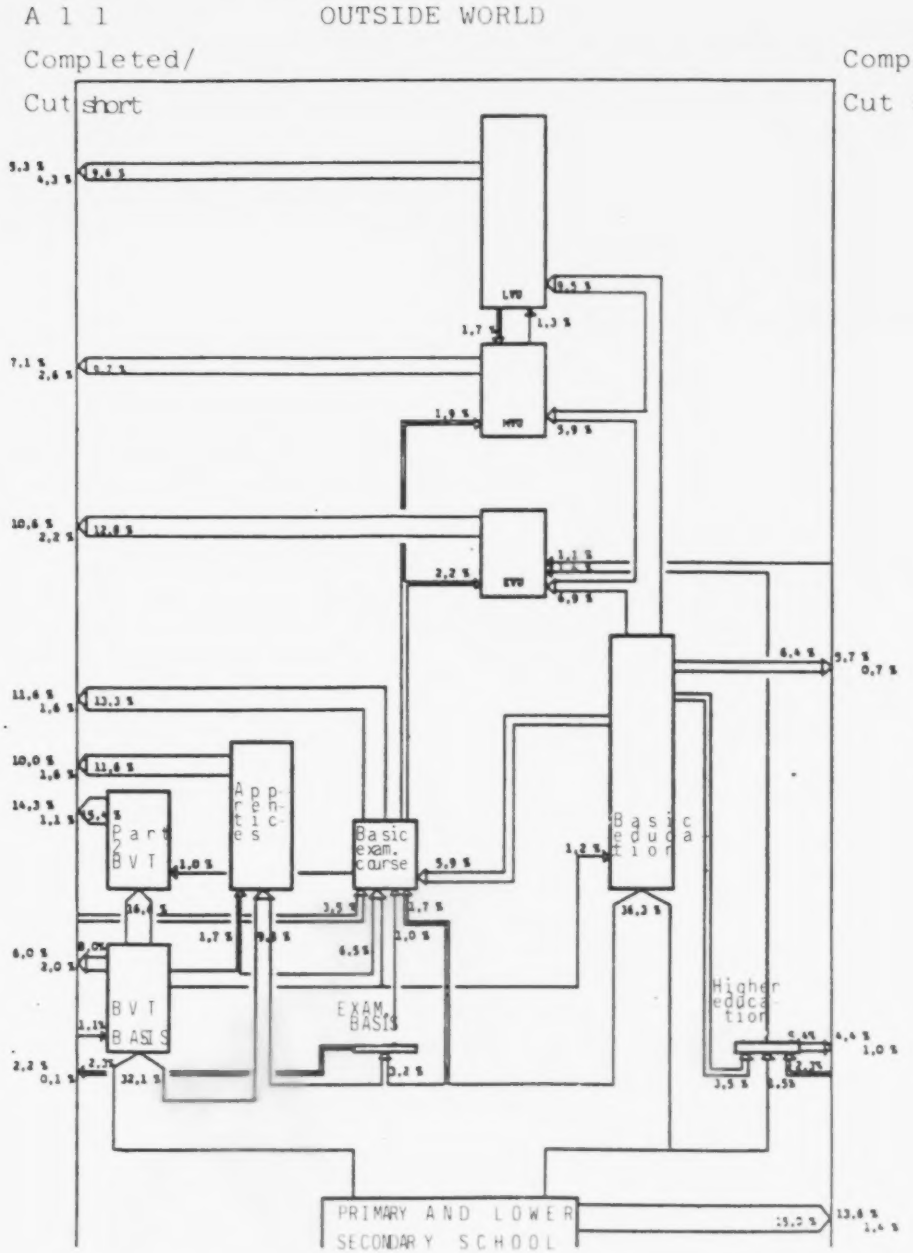


Fig. 3.3. Prescribed transfer pattern 1 October 1980 - 30 September 1981. All, i.e. both girls and boys.

Remarks

From primary and lower secondary school, transfers first break down as follows:

32.1 p.c. to the main category BASIC VOCATIONAL TRAINING COURSES

9.5 p.c. to the main category APPRENTICE TRAINING COURSES

3.2 p.c. to the main category BASIC COURSES LEADING TO EXAMINATIONS ETC.

36.3 p.c. to the main category GENERAL UPPER SECONDARY SCHOOL TRAINING COURSES

1.7 p.c. to the main category EXAMINATION FOUNDATION COURSES ETC.

1.5 p.c. to the main category TRAINING COURSES WITH NO LEVELS (college courses (GRADES) etc.)

15.0 p.c. to the "outside world", i.e. employment or unemployment.

In the pattern there are also the other movements from main category to main category, for example:

- to the main category KVU (short further training courses) come 2.2 p.c. of the prescribed year from the main category BASIC COURSES LEADING TO EXAMINATIONS ETC. and 6.9 p.c. from the main category GENERAL UPPER SECONDARY SCHOOL TRAINING COURSES

- to the main category MVU (medium further training courses) come 1.9 p.c. of the prescribed year from the main category EXAMINATION FOUNDATION COURSES and 5.9 p.c. from the main category GENERAL UPPER SECONDARY SCHOOL TRAINING COURSES
- to the main category LVU (long further training courses) come 9.5 p.c. from the main category GENERAL UPPER SECONDARY SCHOOL TRAINING COURSES and 1.3 p.c. from the main category MVU (medium further training courses).

The figure also shows unintended movements, for example:

- 1.7 p.c. from the main category BASIC VOCATIONAL TRAINING COURSES to the main category APPRENTICE TRAINING COURSES.

Finally, the figure also shows the percentage of the prescribed year which completes or cuts short, respectively, a training course which has been begun, for example:

- out of 32.1 p.c. of the prescribed year which begins basic vocational training, 14.3 p.c. completes the 2-part basic vocational training;

  the overall bvt-completion percentage is therefore

$$\frac{14.3}{32.1} \cdot 100 = 44.5 \text{ p.c.}$$

- out of 9.5 + 1.7 = 11.2 p.c. of the prescribed year at the beginning of apprentice training, 10.0 p.c. completes apprentice training; the overall completion percentage is therefore

$$\frac{10.0}{11.2} \cdot 100 = 89.3 \text{ p.c.}$$

- out of 2.2 + 6.9 + 1.4 + 1.1 = 11.6 p.c. of the prescribed year which starts a shorter further training course (KVU), 10.6 p.c. completes the training; the overall completion-percentage is therefore

$$\frac{10.6}{11.6} \cdot 100 = 91.4 \text{ p.c.}$$

- of 9.5 + 1.3 = 10.8 p.c. of the prescribed year which starts a long further training course (LVU), 5.3 p.c. completes the course; the overall completion-percentage is therefore

$$\frac{5.3}{10.8} \cdot 100 = 49.1 \text{ p.c.}$$

Reservations must be made regarding the above calculations, for several reasons. The returns are 5 years old and changes in the transfer patterns may have taken place in the interim. Regarding the drop-out from basic vocational training, in particular, this takes place primarily after the basis-year, and this is not only an introduction to

further vocational training courses in what is called the 2nd part, but also an introduction to other further training.
In addition, diagrams such as 3.3. exist separately for girls/women and boys/men.

Finally, the Labour Directorate receives statistical returns from the employment offices concerning registered training contracts and publishes quarterly statements of the intake and number of applicants for on-job and apprentice training posts with firms. This is a valuable guide for local authorities, county authorities and counsellors, who follow as closely as possible the trend of practical work experience with firms.

3.3. The basic vocational training system

Vocational foundation courses embrace three types:

- basic vocational training (bvt) courses
- apprentice training courses and
- basic technical training courses.

The description of this section also includes vocational upper secondary school courses in commerce and technology, both of which are based upon a bvt basis-year's training.

Vocational foundation courses exist in about 200 different occupations, most of them as both bvt and apprentice-training courses. Both types of courses lead to certification as skilled persons.

3.3.1. Basic vocational training

For admission to bvt-schools, completion of compulsory general education (normally 9 years' schooling) is required. Admission does not take place on the basis of examination certificates.

Basic vocational training courses are sub-divided into 8 main areas:

- Building and construction
- Graphical and allied trades
- Commercial and clerical sector
- Basic ferrous and non-ferrous metal industries
- Agricultural sector
- Land transport
- Food sector
- Service trades.

Training within one of these main areas starts with one year's schooling, basic vocational training or part 1 of 2-part basic vocational training. Within some of the basic training courses, splitting into different lines within the main industrial sector takes place through the school year.

After the basis-year training comes either part 2 of the basic vocational training, which is alternance training, or there is the possibility of continuing further within other parts of the training system (vocational upper secondary school or technical foundation courses, etc.).

3.3.1.1. Basis-year training

At the vocational school the following are taught:

- departmental subjects
- common subjects
- optional subjects.

In departmental subjects the instruction is given in the form of practical work in workshops and as theoretical instruction in the classroom.The subject-theory and the practical instruction are closely interrelated and will often be given in class without any sharp distinction between them.

Common subjects are studied by all students and are, for example, the Danish language, foreign languages, physical education, mathematics, current affairs and management theory. At the commercial schools no distinction is made between departmental subjects and common subjects. Some

subjects are more industrial than others. Most of the subjects at the commercial schools are theoretical subjects.

Optional subjects vary from school to school; but they can be modelling (design), photography, foreign languages, physical education, mathematics and psychology, for example. The possibility of taking an examination exists in some of the optional subjects.

In the basis-year training, instruction is given 36 hours a week for 40 weeks. At the commercial schools, however, there are 32 lessons a week in the first half-year and in the second half-year the number can vary between 31 and 35 lessons a week.

3.3.1.2. Part 2-training

In order to be able to continue the basic vocational training after the basis-year, it is necessary

- to have a certificate of basis-year training
- to find an on-job training (practical work experience) post with a firm
- to have a training contract drawn up between the student and the on-job training firm.

The school training periods in part 2 embrace instruction in both departmental subjects and common subjects and optional subjects.

3.3.2. Apprentice training

In order to begin an apprentice training course, it is necessary to have an apprenticeship post, and this has to be obtained by the student himself.

Apprentice training courses are divided into the same main industrial sectors as the basic vocational training courses, and the training is in the form of alternance training from the very beginning.

At the school, instruction is given in

- departmental subjects and
- general subjects.

In the departmental subjects, instruction takes place in the form of practical work in workshops and theoretical instruction in the classroom. Subject-theory and practical instruction are closely interrelated and will often be given without any sharp distinction.

The general subjects are, for example, the Danish language, current affairs and management theory. This division into departmental subjects and general subjects does not exist at the commercial schools.

3.3.3. The 8 main areas within basic vocational training and apprentice training

An overview is given below of the training courses within each of the 8 main industrial sectors, with a description within each sector of both basic vocational training and apprentice training, in so far as both exist.

3.3.3.1. Building and construction

The building and construction sector embraces both industrialized building and craft trades, including more specialized trades for restoring older buildings.

The first 20 weeks of basic vocational training are a common course in which the student becomes acquainted with all of the training aspects which come under building and construction. The student then makes a selection from 5 different lines of study:

- electricity
- plumbing/water,heating and sanitation
- bricklaying and concreting
- house-painting
- wood and glazing work

Each line of study is aimed at a particular set of training courses and the choice of line is, therefore, crucial for the courses that can be applied for after the basis-year training. Theory in the departmental subjects consists of, among other subjects, geometry, projection drawing and reading drawings.

About 40 p.c. of the total teaching time in the basis-year is used for general subjects, i.e. common subjects and optional subjects.

The apprentice and the part 2 bvt-student are trained in a particular trade. In the school periods and in on-job training, therefore, they encounter the tasks, materials, tools and problems which belong to that trade.

School attendances have more or less the same duration and content for apprentices and bvt-students. School time covers both general subjects and departmental subjects; but

departmental subjects naturally vary from course to course. Carpenters, for example are instructed in, among other things, roofing and stairway construction, floors and attics, as well as timber cladding of external walls. Plumbers are taught roofing, welding and pipe installation, among other subjects, while house-painters are taught restoration, painting and form and colour theory.

3.3.2. Graphical and allied trades

The first half of basic vocational training is a common course for all students; then the students who wish to become professional photographers, press photographers, silk-screen printers or bookbinders select their respective occupational lines of study, thereby making a binding choice of training. The other students continue on a common course and can choose after the basis-year of training from among the following courses:

- lithographer
- offset printer
- printing technician
- typographical technician

Theory in the departmental subjects consists of, among other things, optics, theory of colour and production methods.

About 40 p.c. of the total teaching time in the basis-year training is spent on general subjects, i.e. common subjects and optional subjects.

The apprentice and the part 2 bvt-student are trained in a particular occupation. Their school times have approximately the same duration and content; but departmental subjects naturally vary from course to course. Typographical technicians, for example, are instructed in, among other subjects, photo-setting, montage and dark-room technology. Printing technicians are instructed in, for example, the tending of various printing machines, while bookbinders are instructed in tending cutting and stitching machines, for example.

3.3.3.3. Commercial and clerical sector

Work in the commercial and clerical sector is divided into 3 main categories:

- retailing (shops)
- wholesaling
- office/clerical work.

The tasks are frequently carried out in conjunction with the sale of goods and services.

A basic vocational training course starts with basis-year training, common to all students. On the basis-year course, instruction is given in

- general subjects (e.g. Danish, work and social studies, foreign languages)
- more business-orientated subjects (e.g. computer science, typing including word processing (WP) and communications; also finance and accounts)

There is no separation into departmental subjects and general subjects in the commercial and clerical sector.

Basis-year training is divided into two half-years. In the first half-year, instruction is given in a number of compulsory subjects, e.g. Danish and foreign languages and also sales and service, while in the second half-year instruction in these subjects continues but, in addition, one or two optional subjects are chosen - they may be, for example, mathematics, window dressing/display, advertising or WP (word processing).

The apprentice and the bvt part 2-student are instructed in a particular trade (a particular economic sector). The school time is organized differently for bvt-students and apprentices, with the bvt-student on 3-4 school attendances, each of 2 weeks' duration, during the on-job training period.

The apprentice attends for specified periods a course leading to the commercial assistant-examination, with instruction at commercial school initially for 4 days and subsequently 2 days a week. The final school period normally includes 3 school attendances of 2 weeks' duration corresponding to those in which bvt-students participate.

SHOP ASSISTANT

The shop assistant (sales person) is employed in retail shops and supermarkets. The retailing sector is divided into branches such as textiles, photography. furniture, hardware, groceries and bookselling. Instruction can be obtained in about 50 branches and the work varies according to the branch.

A shop-assistant training course was started in January 1985. This is an all-round shop training course. It is not based upon branches, but on the jobs in the shops (e.g. buying, selling and display of goods). The shop assistant gives the customer guidance on the goods, i.e. gives information on their properties and applications. In shops with only a few employees, the shop assistant also does the ordering, price marking and display of the goods, while in large stores the shop assistant often has a more specific function in the form of customer service.

OFFICE WORKER

The office worker specializes through his training in one of the following areas:

- office, all-round work
- office, accounts
- office, correspondence
- office, WP
- office, forwarding
- office, ship broking
- office, tourism
- office, banking
- office, savings bank
- office, insurance
- office, local council/county council

Office workers' tasks are very varied, depending in each case upon the size and nature of the firm.

All-round office training is a course on which one learns all about all of the general tasks in an office. Office training with different special subjects is available also - e.g. accounts, correspondence or WP, in which the office worker is occupied mainly with specific areas of work.

Forwarding agents deal with the despatch of goods from one country to another, while the shipbroker is the middleman for contracts for the carriage of goods by sea.

In tourism, banks, savings banks, insurance or local or county councils, the office worker specializes - like other office workers - according to the field of work, carrying out customer service, among other tasks.

3.3.3.4. Basic metals sector

Within the basic (ferrous and non-ferrous) metals sector, work is done on the production, assembly, repair and maintenance of the larger steel constructions such as bridges, ships, machines and engines. Work can also be done on installing ventilation, heating and sanitation, or one can be employed on fault-finding and repair of the smaller or very small articles, such as radios, edp-equipment and measuring instruments. The basic metals sector embraces both small and large handicraft firms (e.g. motor repair workshops) and industries (e.g. shipyards).

Many of the trades are new, resulting from new technology. This is true of, for example, the electronics engineer and the computer engineer; but the sector also includes trades with old traditions, such as smithing.

A vocational training course ("Jernets Grundskole") starts with a basis-year, the first 16 weeks (stage 1) of which are a common course, in which the students become acquainted

with all of the courses in the basic metals sector. A selection is then made from three different lines:

- the smithing and engineering line)
- the electrical line) stage 2
- the transport line)

The line selected is intended to elucidate a particular category of trades and each line is aimed at a particular set of training courses; but the selection is not yet binding. After stage 2 - which is of 4 weeks' duration - the selection is made for the last 20 weeks from among the same three lines (stage 3). This time, the selection is binding - which means that the selection of line is now decisive regarding which courses will follow the basis-year course; but some of the courses can be selected from several different lines. The student can, for example, become a panel beater in coachbuilding, both if he has taken the smithing and engineering line and if he has taken the transport line.

If, after the guidance in stages 1 and 2, the student wishes to take a course in one of the minor trades in the basic metals sector (woodworking trades, gold and silver smithing trades), he will discontinue the basis-year training and begin an apprentice training course.

In the departmental subjects, theory consists of materials science, engineering drawing and safety, among other studies.

About 33 p.c. of the total teaching time in the basis-year is spent on general subjects, i.e. common subjects and optional subjects.

The apprentice and the part 2 bvt-student are trained in a particular trade. The school periods have aproximately the same duration and content for apprentices and bvt-students, and include both general subjects and departmental subjects - but the departmental subjects naturally vary from course to course. Fitters, for example, are taught shearing, bending, arc welding and flame cutting, and also reading drawings and materials science. Electronics engineers are given instruction in microcomputer systems, programming in assembler code, pulse technology, number systems and logic, among other subjects, while motor mechanics are instructed in, for example, petrol and diesel engines, the ignition system, charging equipment, repair technology and systematic fault finding.

3.3.3.4.1.
Development of new training courses within the main sector

Innovations are still taking place in these training courses. As an example, the training of computer engineers will be mentioned first. The object is to provide a job qualification as computer engineer in the maintenance and the fault detection and rectification of computer-controlled systems, and also to qualify the student to assist in development and installation work and draw up the relevant documentation.

3.3.3.4.2.
Next, we shall mention an experimental course which has been started in a number of technical schools, under the slogan "Metal workers for the '90s". In collaboration with selected firms, the Iron & Steel Trades Employers' Association (Jernets Arbejdsgiverforening) is in charge of the formulation of job specifications, qualification-requirements and training programmes, aimed initially to meet the needs of large and medium-sized firms for versatile labour within production and processing.

3.3.4. Upper secondary school vocational training courses

In the preceding section, we described how the basis-year in basic vocational training (bvt) leads on through part 2 of bvt to a qualification as a skilled worker. Within both the commercial and the office/clerical sectors as main economic

sectors, the basis-year can also be the introduction to an upper secondary school vocational training course leading to the higher commercial examination for the higher diploma in commerce - HHX) or to the higher technical examination (HTX). In addition, the basis-year gives access to a number of foundation technician courses; but since there are really many different channels of access to these courses - often via practical industrial experience - they will be described in chapter 4 under "Further training".

3.3.4.1. Higher commercial examination (HHX)

The higher commercial examination course is a theoretical training course lasting 2 years (there is, however, also a variant of 1 year's duration - see below). The students for the 2-year course are admitted on the basis of an assessment of aptitude. The individual school admits students for the higher commercial examination course, and if there are more applicants than places the school will admit the most suitable first. The school will take into account in its aptitude assessment the progress achieved in the basis-year training.

The course confers both a study qualification and a vocational qualification, i.e. it enables the student either to continue study at one of the institutions for higher education, or to seek a job in industry immediately, with a completed higher commercial examination-course.

The training course consists at present of two departments:

- business economics
- business languages.

Instruction is given in Danish, foreign languages (English, German and, where applicable, French), accountancy and business finance, commercial law, data processing, organization and communications, economics, contemporary history and economic geography, etc.

Nearly all of the commercial schools in the country run courses for the higher commercial examination.

. . . .

The course is divided into 2 lines of study:

Line A - with instruction given in communications, typing, organization, data processing, commercial law, economics, accountancy/ business finance and foreign languages;

Line B - with instruction given in communications, typing, organization, data processing, commercial law, economics, accountancy/ business finance, foreign languages and optional subjects (labour market, private finance, shorthand, sales administration and foreign languages).

It should be noted that not all schools can offer all of the above-mentioned optional subjects.

3.3.4.2. Edp-assistant training

The edp-assistant training is a course of either 1 or 2 years' daytime instruction at State-aided commercial schools, ending with a State-supervised leaving-examination, the edp-assistant examination.

The object of the course is to provide the students with a broad basic training which qualifies the student to do

independent programming work and to take active part otherwise in the edp-work, including planning, operation and documentation. The course is arranged in such a way that further training is possible.

Admission to the 2-year standard course:

Completion of the bvt basis-year course with English at the highest standard and the optional subject mathematics I in the commercial and office/clerical sector, or the basis-year course in one of the other main vocational sectors and acquisition of the corresponding preliminary knowledge in English and mathematics.

Admission to the 1-year standard course:

Success in the higher commercial examination, upper secondary school leaving-examination or higher preparatory examination.

Admission to the standard courses can be granted in special cases for students who do not satisfy the prescribed conditions for admission, but who are deemed to have acquired the necessary preliminary knowledge in some other way. This permission, which can be made conditional upon passing special tests, is granted by the school for admission to the 2-year standard course and by the Vocational Training Directorate for the 1-year course.

On the 2-year standard course, the following subjects are taught:

1st year:
- Introduction
- Mathematics
- Physics
- English
- Basic datamatics
- The computer and symbolic machine language
- System description
- Problem-orientated programming language 1

2nd year:
- Organization
- Accountancy and business finance
- Computer sociology
- Problem-orientated programming language 2
- Operative systems
- Data transmission
- Scheduling
- Interdisciplinary information
- Systems design
- Practical exercises
- Concluding project

On the 1-year standard course the following subjects are taught:

- Computer sociology
- Organization
- Accountancy and business finance
- Basic datamatics
- The computer and symbolic machine language
- System description
- Problem-orientated programming language
- Operative systems
- Data transmission
- Scheduling
- Interdisciplinary information
- Systems design
- Concluding project

3.3.4.3. Higher technical examination (HTX)

The course for the higher technical examination is a theoretical course lasting 2 years.

The object of the course is to provide a general and technological basic training which provides the students, through both theoretical and practical (workshop) instruction, with a qualification for further training, especially on the technical side, and also parts of a vocational qualification.

In order to be admitted to the higher technical examination, the student must have taken a basis-year course in one of the main industrial sectors. Students are admitted by the individual school concerned, with special importance attached to knowledge in the subjects mathematics, physics/chemistry and, where applicable, foreign languages. The student can improve his knowledge in these subjects by choice of optional subjects during the basis-year course.

The first year of the course is common to all students. General subjects such as Danish, foreign languages, sociological subjects including management and co-operation studies, mathematics and physics/chemistry are taught. In addition, instruction is given in technical subjects such as technology, design and technical communications. Optional subjects are available also.

In the second year a choice is made from among the following lines:

- building technology
- electrical engineering
- mechanical engineering
- process technology.

In the second year, general subjects continue to be taught, while the instruction in technical subjects is now linked to the selected line of study.

In building technology, instruction is given in developments in building, planning and control of building, and structures of wood, brick, concrete and steel, among other subjects.

In electrical engineering, instruction is given in fields of both heavy-current and light-current technology. The subjects include materials and component science, test-measuring technology, regulation and control technology, analogue and digital technology, signal transmission and machining technology.

In mechanical engineering, instruction is given in machining, jointing and measuring technology, materials science and production control.

In process engineering, instruction is given in the various chemical and microbiological complete and partial processes - within the food, oil, fertilizer and drugs industries, for example.

Examinations are held after the 1st and 2nd years in the training.

The higher technical examination is directed primarily towards further technical studies:

- further technician training courses (see Ch. 4)
- practical engineering studies at technical college
- the more theoretical engineering studies ("akademiingeniorer"and "civilingeniorer").

For admission to these studies, in the case of the two first-mentioned categories relevant practical experience in industry is required, and, for the last-mentioned category, additional, theoretical upper secondary school-courses in mathematics, physics and chemistry, where applicable.

The higher technical examination was introduced on an experimental basis as late as in 1982. Until then, there had been no technical training at upper secondary school in Denmark. HTX existed at eight schools in 1985, and the system was expanding.

It should be noted that the HTX-course and the edp-assistant-course are both under review and there will be only one side or department, with wider choices.

3.3.5. Semi-skilled worker training courses

1. Terminology. Forms. Subjects

Semi-skilled worker training is based upon close co-operation with the labour market-participants and organizations, in order to ensure that the courses always meet the needs of the individual and of the community.

The training consists of courses of varying duration and involves the following, for example:

- close contact with industry;
- essentially practical courses;
- theory closely linked with practice or of general interest;
- courses normally of short duration, usually 3 weeks;
- each course normally provides vocational qualification, and a given number of courses provide further vocational qualification;
- basic courses, updated courses and further training courses exist, including courses leading to the acquisition of a certificate and
- no preliminary knowledge is required for the basic courses.

When a course is completed with a satisfactory result, the course certificate is awarded.

In some cases the semi-skilled worker training leads on to other training systems within the community - the supplementary training system for skilled workers, for example.

The training takes place at day school. It is provided free of charge and can be taken by all persons over 18 years of age who have or are seeking employment within the field of work concerned.

Some courses are held at boarding school where students whose homes are a long distance away can be given board and lodging. Non-boarders pay less for attendance at these schools.

A normal school-week is 5 days; no classes are held on Saturdays.

Course participants at day school normally receive payment for loss of earnings. This payment is made to both wage-earners with unemployment insurance and to those without insurance; also to part-time workers. In addition, payment can in some cases be made to persons other than wage-earners - e.g. housewives and self-employed persons.

Courses can be set up within those trades and industries in which there is thought to be use for "tailor-made" training.

There are at present about 500 different courses distributed among the following trades and industries:

- Clothing industry
- Bookbinders
- Book printing
- Brewing industry
- Building and construction
- Film industry
- Fishing
- Fishery industry
- Hotels and restaurants
- Floor-covering industry, tanning and leather goods industry, saddlery and upholstery
- Agricultural sector
- Packaging, corrugated board and paper goods-industry
- Boilermen and machine-minders
- Meat industry
- Transport by land
- Dairying industry
- Metal-working and -producing industries
- Plastics industry
- Process industry
- Cleaning-, property- and and security-service
- Boot and shoe industry
- Non-metallic minerals industry
- Textile industry
- Wood processing industry
- Laundry industry

Within each of these sectors, industry committees have been set up, consisting of equal numbers of employee- and employer-representatives. These industry committees have the

task of drawing up training programmes within the sector, and the programmes have to be approved by the Training Council for Semi-skilled Workers (Uddannelsesrådet for specialarbejdere) before they are used.

In this way, the people within the industry itself ensure that the courses are always in accord with developments and needs within the sectors concerned.

Enrolment on the courses can take place by application to

a semi-skilled workers school
an employment office
a trade union or
an unemployment insurance fund.

3.3.6. Training supplied to combat unemployment

The trend in the work-force, employment and unemployment is described in Chapter 1. It is shown that unemployment is higher for women than for men; also, that unemployment among the younger age groups, 16 - 24 years of age, is higher than among the older groups.

Combatting unemployment is permanently on the political agenda, regardless of whether the government is

social-democratic or non-socialistic. The means for combatting unemployment are overall economic policy (cf. in Chapter 2 on this) and also the supply of various types of training.

The nature of the supply of training which has been used in more recent years will be described here. Under the previous government, the emphasis was laid upon working out special initiatives for employment projects which could absorb the unemployed, especially the young ones. Under the present government, less importance is attached to these special initiatives; instead, efforts are made to channel the young unemployed into the approved training schemes - but these are, it should be noted, schemes which have prospect of leading to permanent jobs. This process of control has been put into the system on the basis of the report on the so-called National Planning Analyses (see sub-section 8.2.).

Three types of training systems still exist to combat unemployment:

- EIFU = introductory vocational courses for young persons (erhvervsintroducerende kurser for unge)
- EIFL = introductory vocational courses for the chronically unemployed (erhvervs-introducerende kurser for langtidsledige)
- Production training schools.

Activities under the EIFU- and EIFL-programmes both peaked in 1983 and have been declining slightly since then. Production training schools, however, are a new type of school, which look as if they will become permanent. Whereas EIFU and EIFL come under the Directorate for labour-market training schemes, production training schools come under the Ministry of Education's Directorate for popular education, free primary schools, etc., and they depend upon initiatives taken by the local and county councils.

The EIFU-courses have been held since 1972. Their object is to provide a broad vocational introduction to the labour market so that the opportunities for young people to choose their training or to obtain employment are improved. The courses are arranged for young persons between the ages of 15 and 25 years, are held at the schools for semi-skilled workers and consist of a school course period and an on-job training period. The average school course-duration has been 9 weeks in the last few years, while the period of practical work experience is normally 4 weeks.
Course participants can receive individual financial aid whilst they are participating, in both the school part and the practical part.

The EIFL-courses have been held since 1978. Their object is to provide a broad vocational introduction, to widen the individual's range of interests, to increase self-confidence and to strengthen bonds with the labour market. In

addition, special courses in the Danish language have been held for immigrants since 1980.

The courses take place at the semi-skilled worker schools. The proportions have been about 70 p.c. women and about 30 p.c. men. On the courses for immigrants, however, the numbers of men and women are approximately equal.
The average course-duration has been around 7 weeks in general, but about 11 weeks for the immigrant courses.

The production training schools started in the 1970's and have since expanded further. There is now a special law on these schools, the Law of 6 June 1985 concerning production training schools.

Under this law, the function of a production training school is to provide combined instruction and production programmes for young unemployed persons. The school work must include both practical work, production and theoretical instruction closely related to it. The object is to put participants in a better position to start a qualifying training course or obtain employment on the labour market.

Local and county authorities can take the initiative in establishing production training schools; but they must be set up as independent institutions with a managing board of

representatives of the local or county council concerned and representatives of organizations on the local labour market.

Participants receive payment and the school can contribute towards the participants' travelling expenses.

In a White Paper on production training schools, a detailed account is given of the teaching philosophy which characterizes these schools, and in the same White Paper studies concerning the circumstances and attitudes of the young in relation to society and working life are described also.

Chapter 4: UPDATING AND REFRESHER TRAINING AND FURTHER TRAINING

4.1. Terminology. Forms. Subjects

The concepts basic training, updating and refresher training, further training can be defined as follows:

- Vocational basic training is the term for a generally-recognized training which entitles those who have undergone it to follow a vocation. The principal forms in Denmark are courses held under the Law concerning apprentices (laerlingeloven) and courses under the Law concerning basic vocational training (loven om erhvervsfaglige grunduddannelser).

- Vocational updating and refresher training is training with the aim of updating or refreshing knowledge and skills acquired in basic training, including that which confers knowledge and skills subsequently adopted in basic training.

- Vocational further training is training with the aim of extending vocational qualification so that it is one stage higher than basic training.

A feature common to these three types of training is that they are intended to qualify the recipient for employment

and for following a vocation. Nowadays, with comprehensive, rapid development of new technology, all three types of training must be developed so as to prepare the recipient for using new technology.

New technology can, in principle, be introduced in all three types of training; but every facility exists for postponement. As stated in the definition of updating and refresher training, the purpose of this can be to renew knowledge and skills acquired in basic training, and in such a case the basic training is first with new technology. But the reverse situation can apply also, with updating and refresher training being the first with new technology.

Further training is in principle one stage higher than basic training, and this can be due to the person with further training having taken part in preparation of the new technology which is subsequently introduced into basic training and into updating and refresher training.

In Chapter 3 the main features of basic vocational training courses are described, including the content of the subjects in the basic courses. Their nature as alternance training is described also, i.e. training which consists of predetermined alternation between learning on the job in a firm and receiving instruction in a vocational school. Both forms of basic vocational training in Denmark - apprentice

courses and basic vocational training courses - are alternance training.

Vocational updating and refresher training in Denmark, on the other hand, is carried out only at vocational schools; but in every single one of the modules composing the updating and refresher training, a considerable amount of practical training is included, given - being practical training - in the workshops and laboratories of the vocational schools.

Generally speaking, vocational further training courses contain a considerable proportion of theoretical subjects - basic subjects, such as physics, chemistry and mathematics, or theoretical vocational subjects in technology, and materials science. Some further training courses are wholly school-based, while others are of the nature of alternance training.

4.2. Physical/geographical location of training courses

Basic training courses are generally taken by young persons who are still living with their parents and the choice of training is therefore considerably dependent on whether places of training can be found not too far away from the parents' home. There are two physical/geographical locations

for alternance training, namely the vocational school and the firm. Consequently, a tie with the home or with the registered office address exists, and this means that the choice of training will be greatly limited if only a few training facilities exist within the surrounding area. This is discussed in more detail in Chapter 3.

A similar situation exists for further training. Further training courses, being concentrated in schools or training institutions, are hardly as dependent upon the geographical location of the firms.

For updating and refresher training, given mainly in the form of short courses which are normally of one or a few weeks' duration, the location of the place of training is less important. The significance of travelling-distance is reduced especially by the contribution of cover or grants for travelling expenses. The limiting effect of board and lodging expenses is reduced by arrangements with boarding schools, or by board-and-lodging grants.

4.3. The statutory basis

Since 1965, as part of labour market-policy the Ministry of Labour has supervised an updating and refresher training course of skilled workers, etc. It has been carried out in

accordance with a circular issued in June 1965, which was based upon the same principles as the Law of 1960 concerning training for unskilled workers. An actual statutory basis was established, however, in the Law concerning labour-market training, passed in June 1985. This updating and refresher training of skilled workers, etc., will be described in sub-sections 4.4. and 4.5.

The Minister of Labour tabled a bill in the Lower House of Parliament during 1984-85, for a Law concerning vocational updating and refresher training. The bill was adopted and exists as Law No. 271 of 6 June 1985 concerning updating and refresher training, with the sub-title of "Vocational courses, etc.". This innovation will be discussed in sub-section 4.6.

In addition, in Chapter 6 there is discussion of control of the two forms of updating and refresher training. This will be prefaced here with the remark that the principles of control differ. Updating and refresher training under the Ministry of Labour is based upon the initiative and responsibility for execution of the training committee composed with equal representation of the two sides involved, whereas this training under the Ministry of Education's law requires a local initiative with close co-operation between between trade and industry and training institutions.

4.4. Training rules. Training specifications

In order to ensure standards of quality for the training courses - whether they be basic courses, updating and refresher courses or further training courses - certain standards for complete sets of training rules have been drawn up. The rules used in updating and refresher training always cover the following 10 aspects:

1. Purpose
2. Conditions of admission
3. Content of the instruction given
4. Number of participants
5. Duration and location of the courses
6. Issue of course certificates
7. Form and distribution of the instruction
8. Specifications for classrooms
9. Classroom equipment and aids
10. Teacher requirements.

Regarding admission conditions, it should be noted that efforts are generally made to clarify very exactly the admission conditions, which can ensure that the person seeking training can be reasonably certain of benefitting from the instruction by virtue of possessing the necessary qualifications, aptitude, etc. For the training modules, built up in series, one requirement will normally be that the candidate has been through the immediately preceding module.

It is assumed in the whole training specification that combined theoretical and practical training can take place. It is therefore a requirement that the necessary premises for practical work experience (workshops or laboratories) and the necessary equipment are available.

The teacher or instructor is required to offer - and this is incorporated in the whole arrangement - a course of instruction which covers new elements in the training.

4.5. Summary of updating and refresher training offered in 1985

Main field 1: BUILDING AND CONSTRUCTION	Electrician's trade
	Painter's trade
	Glazier's trade
	Bricklayer's trade
	Carpenter's and joiner's trade
	Woodworking industry
	Water, heating and sanitation
Main field 2: GRAPHICAL AND ALLIED TRADES	Book printing and reprography
	Bookbinding
	Silk screen printing

Main field 3: COMMERCE AND OFFICE/ CLERICAL	Commerce and office/ clerical sector
Main field 4: BASIC (FERROUS AND NON-FERROUS) METALS	Engineering and tool technology Metalworking and welding technology Automotive engineering and body technology Electronics Gold and silver smithing and engraving technology Other technologies Refrigeration and water,heating and sanitation technology. Natural gas Aeronautical engineering General and interdisciplinary subjects
Main field 5: AGRICULTURAL SECTOR	
Main field 6: LAND TRANSPORT SECTOR	

Main field 7: FOODSTUFFS SECTOR	Baker
	Confectioner
	Meat industry
Main field 8: SERVICE TRADES	Hairdressing
	Tailoring
	Chimney sweeping
	Photography
	Optician
	Watchmaking
	Stonemasonry
	Engineering draughtsman/ assistant
	Dental technician

4.6. Updating and refresher training under the Ministry of Education's Law concerning updating and refresher training

The wording of the Law is relatively brief. The aim of the Law is to encourage new initiatives to promote the development and execution of vocational updating and refresher courses and further training courses, with close local co-operation between trade and industry and training institutions.

When the Law had been passed, the Minister of Education appointed an advisory council for updating and refresher training, the composition of which differs from that which had been usual hitherto for updating and refresher training, with respect to organizational influence. Not only are the chairman and deputy chairman personally appointed by the Minister; 12 other members are, too. In addition, there are 21 members in the council who are appointed by that number of organizations, institutional associations or authorities.

Within the first 6 months of its existence, this Council for updating and refresher training has held 3 meetings and one conference of several days, to discuss the possibilities of encouraging the initiatives in the best possible way.

The target group is characterized as follows:

The courses are arranged for persons who work or will be working in the private sector as

* technicians, foremen, export assistants, middle managers
* self-employed persons, assisting spouses
* new businessmen or
* others in the category between skilled workers and academics.

But other groups can participate also, if they need training on the same lines.

For example, several categories of personnel in a firm can have the same training requirement, which it may be important to meet with common courses.

Unemployed persons and persons working at home can take part also.

Participants must have attained their 25th birthday or have been connected with the labour market for at least 3 years.

(It is expressly stated that labour-market training courses are offered for semi-skilled and skilled workers, etc.)

For the financial year 1985, a small grant of about 3.5 million kroner was available, as a modest beginning, for distribution on application, to institutions wishing to undertake a development project for new training courses.

Universities and university centres have received grants for developing export-promoting courses in foreign cultures, languages and social conditions and for courses in marketing and finance.

Technical colleges in Horsens, Sonderborg, Esbjerg and Arhus have obtained grants to develop edp-courses with technical applications and also courses with building technology- and engineering-applications.

Vocational schools (technical schools and business schools) have obtained grants to develop courses for supervisors and foremen, sales personnel, new businessmen and technicians.

For 1986 a grant of at least 50 mill. kr. is available for development work. After the application period expired on 1 May 1986, just under 300 applications were received for funds for development work and about 200 applications for funds to provide courses. The main pool of funds for 1986 has been distributed on this basis.

The majority of applications and grants are intended for development work and the actual measures for updating and refresher training will thus not be implemented until 1987 or later.

4.7. Vocational further training

Vocational further training courses will be described here in the following categories:

- Basic technical training courses
- Short further training courses (KVU)
- Finance/administration training courses, etc.
- Vocational teacher training.

In addition, numerous opportunities exist for further training in the institutions for higher education and universities; but description of these falls outside the scope of this report.

4,7,1, Basic technical training

The basic technical training courses are generally alternance courses of two years' duration.

Many different paths exist for admission to these courses:

- the basis-year in basic vocational training, with special optional subjects or certain supplementary courses, where applicable
- extended lower secondary school-leaving examination

- upper secondary school-leaving examination or higher preparatory examination
- practical work experience in industry.

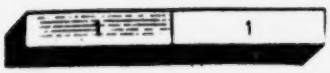
A considerable proportion of these students have been found to enrol on these courses on the basis of practical work experience, and it is for this reason that the description is given here and not in Chapter 3.

After basic technical training, the student can obtain further training through the system of further technical training courses (see 4.5.2.).

A number of basic technical training courses exist today:

- laboratory worker
- foodstuffs assistant
- engineering draughtsman
- technical assistant
- audiological assistant
- outfitter's assistant
- knitwear assistant
- textiles assistant
- dye-works assistant.

Only the first four will be described here.

Laboratory worker: 

The course lasts two years and consists of 1 year at school and 1 year's practical work in industry.

In order to be admitted, the student must have taken one of the following courses:

- basic vocational training course within the commercial and office/clerical sector, with optional mathematics and physics/chemistry

- basic vocational training course within the foodstuffs sector, processing line with optional mathematics

- extended lower secondary school-leaving examination in arithmetic/mathematics and physics/chemistry, and also the lower secondary school-leaving examination in Danish, German and English

- a course at a higher level than that of the above.

At the school instruction is given in laboratory technology, chemistry, physics, microbiology, materials science, computer science and also technical language and safety in the laboratory. About one-half of the time is spent on

laboratory exercises, with a view to developing skill in carrying out exact physical and chemical measurements.

Foodstuffs assistant:

Training for foodstuffs assistants is still in the trial stage. The course is of 2 years' duration and consists of 38 weeks at school, 1 year's practical work in industry and 2 weeks at school.

In order to be admitted, the student must have taken a basic vocational training course within the foodstuffs sector. Admission is possible also if the student has been trained in a foodstuffs occupation.

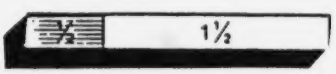
In addition, the lower secondary school-leaving examination in arithmetic/mathematics, physics/chemistry, German and English, or corresponding qualifications, are required (possibly acquired through optional instruction on the bvt-course).

Students seeking training who have passed the upper secondary school-leaving examination or higher preparatory examination can be admitted also; but further practical work experience in the course of the training is required (in the periods when other students have optional instruction).

The training includes, among other studies, modern food production and processing and also practical technical exercises which are important for the control sector in the food industry.

Instruction is given at the school in, among other subjects, arithmetic, mathematics and statistics, food chemistry, microbiology, hygiene and food technology. The training also includes machinery design and construction, materials science, laboratory technology with exercises and also food legislation.

Practical work experience takes place with food firms, where the student obtains an insight into manual, machine and administrative work, for example.

Engineering draughtsman: 

The training lasts 2 years and consists of 6 months at the school and 1½ years' practical work experience.

Admission to the training: In order to be admitted, the student must have had basic vocational training, or equivalent qualifications acquired through other school training or through employment.

Course content: At the school instruction is given in, among other subjects, arithmetic/mathematics, technology and engineering drawing. Practical work experience takes place in a drawing office in public undertakings or private firms.

Technical assistant:

B-line
M-line
D-line

The course lasts 2 years and consists of 6 months at school, 1 year's practical work experience in industry and a further 6 months at school.

Admission to the course: In order to be admitted, the student must have undergone basic vocational training in the building and construction, basic (ferrous and non-ferrous) metals or commercial and office/clerical sectors, or have equivalent qualifications acquired through a period of the same length spent as a basic training course. Qualifications can be acquired through other academic training and/or through employment.

Course content: At the school instruction is given in, among other subjects, natural science, draughtsmanship and design, technology and materials science, production engineering, business finance and also computer science and land surveying. Practical work experience takes place in the technical departments of firms in the building and construction sector and also in mechanical engineering,

electrical and other fields. Practical work experience can take place also in public institutions or with architects, engineers and surveyors. The B-. M- or D-line is not selected until after the practical work experience.

4.7.2. Short further training courses

The short further training courses (KVU) can be described briefly with the following characteristics:

- KVU usually requires 12 years' prior training or an equivalent background of experience.
- The duration of KVU will often be 1 - 2 years and will not exceed 3 years for the theoretical instruction.
- A KVU will usually either require practical work experience or will itself contain practical work elements.

The short further training courses embrace three main categories of training:

- further technician-training courses
- courses in finance and administration, etc.
- social and health training courses.

Only the first two of these three categories fall within the

main scope of this report and will be discussed below. In addition, a rather special type of KVU will be described, namely vocational teacher training which would seem to belong here, according to the KVU-characteristics set out above.

4.7.2.1. Further technical training

Further technical training courses are based upon a basic vocational training, a higher technical examination or a basic technician training.

The training normally takes place at the school and is usually of 1 - 2 years' duration.

The following further technical training courses exist:

- building technician
- building designer
- survey technician
- master-school in building technology
- further training course for house painters
- wood technician
- electrician
- commercial el.
- gas technician
- gas fitter/plumber
- design craftsman in gold and silver
- measurement technician
- environmental technician
- laboratory technician, biology
- lab.techn., chemistry

- electronics technician
- engineering technician
- water,heating and sanitation technician
- gas technician
- industrial product developer
- chemical technician
- food technician
- dairy technician
- ready-made clothing and knitwear-technician

Only the courses for food technician, building technician and building designer are discussed below, as examples. These are some obvious further training-possibilities from laboratory worker, foodstuffs assistant, engineering draughtsman and technical assistant, respectively, which are described as examples of basic technical training courses in sub-section 4.5.1.

Laboratory technician (chemistry)

This is a 1-year course; it can be commenced each year in August.

Instruction is given in the subjects general chemistry (theory of atoms, molecules, etc.), inorganic chemistry and organic chemistry. Technical arithmetic, mathematics and physics are taught also, and the instruction includes laboratory technology, industrial safety and industrial conditions, technical English and German and library-use. A

number of practical laboratory exercises are included. This laboratory technician-training has chemistry as the main subject. Similarly, there is a laboratory technician-course with biology as the main subject.

Food technician

The course lasts 1 year; it can be commenced each year in August.

In order to be admitted, the student must be a trained foodstuffs assistant.

Instruction is given in a number of basic subjects such as arithmetic, mathematics and physics (temperature and humidity measurement, pneumatic control, etc.). In addition, a number of more specialized subjects are taught, such as machinery design and construction (pumps, refrigeration equipment, compressors, etc.), measurement and control technology, refrigeration technology and materials science. The instruction also includes food technology and packaging technology, industrial safety and industrial conditions.

Building technician

The course is of 1½ years' duration.

Instruction is given in the basic mathematical/physical fields which embrace mathematics, physics and chemistry. The subjects in communication technology include Danish, foreign languages, drafting practice, free-hand drawing, surveying, cubing and surveying. In addition, building technology-subjects such as load-bearing structures (rafters, bearer beams and walls), building services, building design, materials science and also planning, control and administration of building (including scheduling and financial calculations) are taught. In each of the 3 half-years, a major interdisciplinary project of 10 weeks' duration is worked out. In the first half-year, the exercise can be, for example, tender documents (working drawings and specification) for a small factory building. In the second half-year it can be making drawings, calculations, etc. (for building permit-applications) for a single-family house, while in the third half-year work is done on detailed study of a building element (its production, assembly and installation). A building technician can undergo further training to become a building designer.

Building designer

The course lasts 2 years.

In order to be admitted, the student is required to have passed the building technician-examination.

The course is in two parts. The first part is of 1½ years' duration, teaching among other subjects house-building, building design and load-bearing structures. Instruction is given also in building services, materials science and building law. In addition, planning and control of building, and costing, are taught.

The second part lasts six months, during which work is done on a course-leaving project and a special subject of the student's own choice. The leaving-project can be working out a complete project prepared for invitation to tender. The optional special subject is intended to provide additional knowledge of a particular subject-area and also skills for independent work.

4.7.2.2. Finance/administration courses, etc.

The short further training courses in finance and administration are typical part-time courses of 1 - 3 years' duration. They have become very widely established in the last few years, particularly as further training for persons who have some experience in trade or industry after basic vocational training.

There are courses for the occupations 'merkonom','teknonom', 'datanom', 'datamatiker' and 'lingonom'. The 'merkonom'-, 'teknonom'- and 'datamatiker'-courses are briefly described below as examples of these types of training courses.

'Merkonom'-training consists of the common training courses in business organization and finance, and also co-operation management. In addition, training is given in a number of different lines of study, namely shop management, data processing, production management, export, finance, purchasing, marketing, organization, personnel administration, accounts, transport and stocktaking.

Various special subjects can be selected within each line.

For many of the subjects, study takes the form of work in study groups, with a view especially to enabling adults to attend the courses. The purpose of study group-work is to ensure deeper understanding of fundamental parts of the subject-area and to train participants in:

- systematic formulation and treatment of problems
- gathering and analysis of reference sources
- systematic written and oral presentation.

Study group-topics are formulated by the teacher in consultation with the participants, and the individual

school concerned decides whether individual tasks or group tasks will be used in the different subjects.
In common subjects and special subjects, the course ends with a written examination under Government supervision which is marked on the 13-scale.

'Teknonom'-training

After being approved by the Vocational Training Directorate, State-aided technical schools can hold 'teknonom'-courses which end with a Government-supervised examination. 'Teknonom'-courses can be held within technical or administrative subject areas.

The object of the instruction is to provide course participants with skill qualifications for performing duties in their job. The instruction is intended to enable the participants to acquire knowledge and skills in different fields and to provide an opportunity to achieve all-round training in their particular occupation.

The courses are constructed on the 'building block-system', in which the common courses of business finance and business organization are combined with the various special courses. These special courses can be taken individually or together, at the participants' discretion.

The 'datamatiker'-training is a short, vocational, further training course in computer and information science and technology (informatics) of 2½ years' duration. The course is divided into 5 half-year terms, and after the 1st to the 4th term, an oral examination is held on the subjects studied during the whole period. In the 5th term, an examination project is prepared and defended orally.

The 'datamatiker'-course is a wide-ranging course; but this means that the opportunity exists for the student to study one or more special fields in depth. The vocational aim is achieved through the paedagogical idea of the study, i.e. presenting the students with practical problems of increasing complexity, with the object of their acquiring problem-solving skills and formulating theories and methods themselves in conjunction with their solution of the problems. This is regarded as a necessity, in a field which is undergoing such explosive growth as that of edp.

The 'datamatiker' is to be used in numerous situations, in both the public and private sectors, with a view especially to the following job areas:

- Planning and introduction of business management systems (administrative and technical/financial).

- Planning,installation and implementation of operative service systems (e.g. terminal systems in financial institutions, cash-desk terminal systems, booking systems, information systems, etc.).
- Edp-industry jobs, in the widest sense (consultants, systems specialists, instructors, etc.).
- Edp used in product development, i.e. in firms which use edp-technology, microelectronics, etc., in the products which are developed and sold by the firm (e.g. automatic control systems, measuring and recording systems).

The course is constructed on the basis of a number of exercises and case-studies which are intended to cover a wide spectrum of practical problems.

Instruction is given in the following subject areas:

- programming
- system architecture
- administrative systems-work
- corporate analysis
- standard programming
- user-orientated systems development
- production- and stock-control
- edp in stock control and process control
- large systems in general

- service systems
- office automation
- edp in public administration

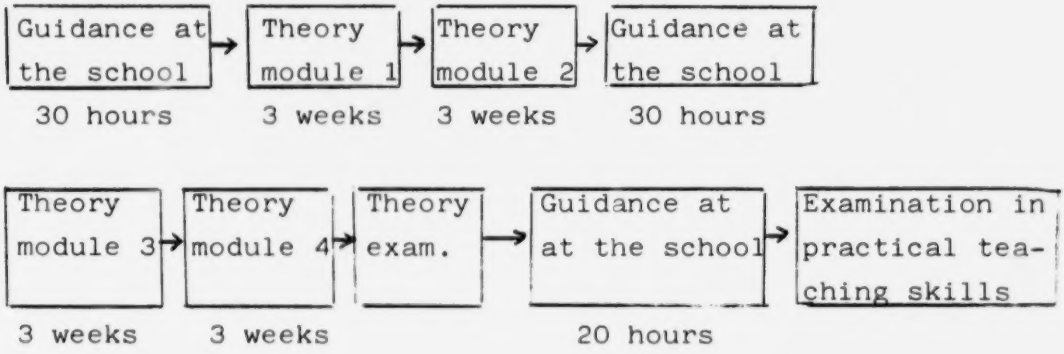
4.7.2.3. Vocational teacher training

There are no vocational courses for vocational teachers among the industrial trades. The typical situation is that the person concerned first undergoes trade training and then, after a few years' experience in industry, decides to become a vocational teacher.

In this report, the main features of vocational teacher training will first be described in outline only, the reader otherwise being referred to Else Koefoed's report: "Erhvervslaerernes situation i Danmark (Situation of vocational teachers in Denmark), CEDEFOP 1982" and the 1985 Supplement to this.

Vocational teacher training is conducted by the National Vocational Teacher Training Institution (Statens erhvervs-paedagogiske Laereruddannelse, SEL), a governmental institution under the Vocational Training Directorate of the Ministry of Education. SEL is a nation-wide institution which organizes courses regionally, as far as possible, so that the participants can reach the place of the course without spending too much time travelling. Courses will often be held at one of the region's vocational schools.

At the start of the vocational teaching-activity, basic teacher training, the paedagogikum (diploma course in education) is taken. For technical school-teachers, this is designed as alternance training, i.e. theory-modules alternating with teaching practice - partly under the guidance of an experienced teacher - as outlined in the following figure.



The theory-part of the diploma course, deals with a number of topics in educational theory, psychology and teaching method. Teaching takes place under a high degree of control by participants and use of types of project work. It ends with a substantial written assignment, prepared individually or on a group-basis, and the theoretical test is based upon this. The result of the marking is given as passed or failed.

The practical part of the diploma course, guidance in teaching skill, normally takes place at the school where the trainee teacher will also already have begun his own independent teaching practice, parallel with this. In the beginning, the trainee follows his instructor's lessons and

then gradually takes over the teaching himself. Instructor and trainee discuss the arrangement of the teaching and then evaluate the teaching given, with general and special subject-teaching methods taken into account in the discussion. The period of guidance - normally 80 hours in all - ends with the test in practical teaching skills, in which the candidate first gives a lesson which he has prepared by himself, in the presence of an examining-panel, and then gives an oral account of the paedagogical background to his performance.

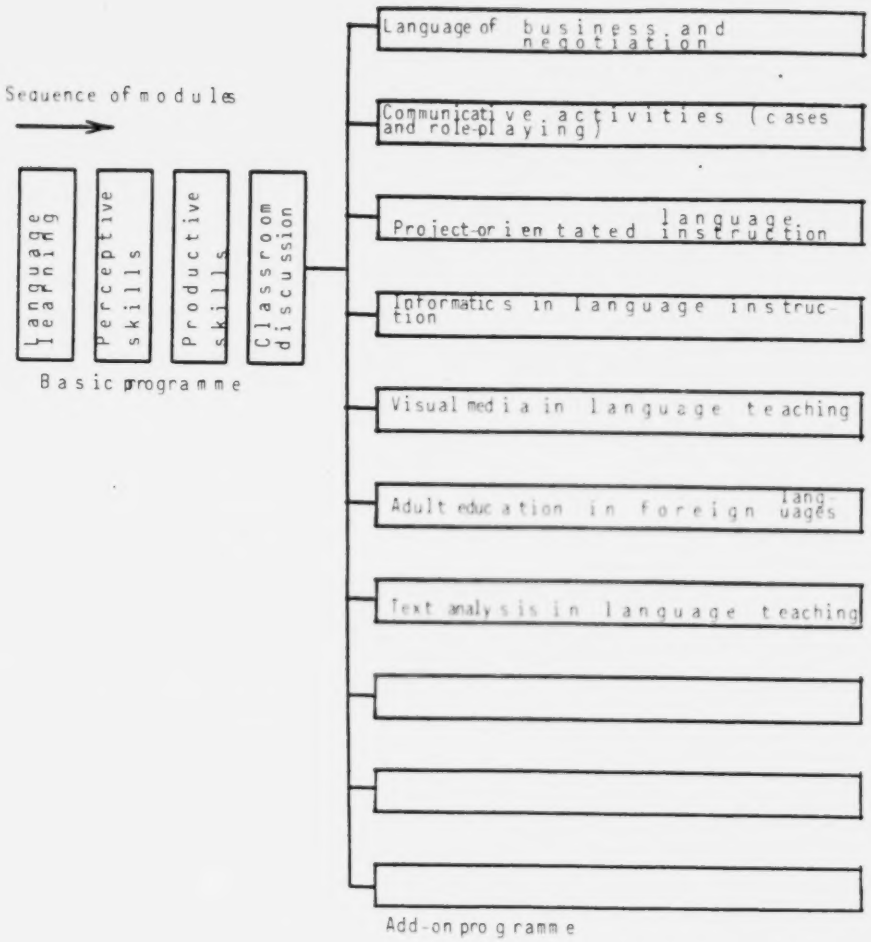
For teachers at business schools, the content of the diploma course in education is broadly as outlined above for teachers at technical schools.

For the theoretical part, however, only a course of 96 hours in teaching method is compulsory, whereas educational theory and psychology are learned by private study, supplemented in some cases by additional courses organized by SEL. The theoretical part of the diploma course ends with two written examinations, in teaching method and educational theory and psychology, respectively. Marking is on the 13-scale. The practical part takes place in accordance with principles as outlined above for teachers at technical schools.

Teachers in labour-market training courses take a diploma course in education as described for teachers at technical schools. SEL organizes the courses for these teachers also.

Updating and refresher training and further training for vocational teachers embrace a large number of courses which are either of a general paedagogical/psychological nature or specialized/special teaching method-courses. Strong development of updating and refresher courses in special teaching methods has been taking place, both qualitatively and quantitatively, in the last few years. This development takes place typically in the form of the building-up of fairly long modular courses in which the teachers alternate between teaching practice for considerable periods of time and taking part in short, intensive updating and refresher training modules.

As an example of an updating and refresher course in special teaching method, the model is shown below of the course in teaching foreign languages, designed for foreign language-teachers at business schools.



The training model consists of a basic programme and a number of add-on modules, each module covering 3-5 days' instruction.

The purpose of the basic programme is to give participants an understanding of the latest developments in the teaching of foreign languages and to enable them to combine theory with their everyday teaching practice.
The basic programme embraces study of fundamental concepts and methods of language teaching, and training in the use of these concepts and methods in language teaching which takes place in the business school.

The add-on programme embraces a discretionary number of modules, and at the moment these are the seven subject areas entered in the above figure on the training module. At the add-on level, the modules are separate courses with no interrelationship between them.

Chapter 5. HISTORICAL BACKGROUND

5.A.
In the 1979-report, the background is discussed in two chapters; chapter 2 deals with the labour-market legal situation in the following sections:

5.A.1.
- Historical development of the legal situation.
- The development of collective labour agreements.
- The Ministry of the Interior's Labour Legislation Committee
- Development of a collective labour legislation.
- Job study-agreements and co-operation agreements
- The Permanent Court of Arbitration changes its name to the Labour Tribunal.
- Extension of the right of co-determination.
- The Labour Tribunal Act of 1973.
- Workers' proposal on joint ownership of the firm's capital.
- The question of the right to participate in educational activities and the right to receive compensation for loss of earnings during participation in courses.

And chapter 3 deals with main features of the historical development of vocational training in the following sections:

- Introduction on the earliest history of vocational schools
- Commercial and clerical training courses, with

examination of the Freedom of Trade Act of 1857, the Apprenticeship Act of 1889, the Supervision of Technical Education Act of 1916, the Apprenticeship Acts of 1921, 1937 and 1956, and the new vocational foundation courses (faglige grunduddannelser), subsequently called 'basic vocational training courses' (erhvervsfaglige grunduddannelser, efg)

- Other training courses.
- The Prime Minister's Department's Technical Commission 1956-59.
- Semi-skilled workers' training.
- Updating and refresher training.

These accounts or articles are included in the Danish, unabridged edition of the report; but they are not reproduced in the present edition. However, an update of the account of joint ownership-law, etc. (penultimate topic in chapter 2 - see above) and also an account of the position adopted by the Lower House of Parliament regarding the supply of employment and training for unemployed persons has been added to them. These additions are reproduced unabridged below as:

5.A.9. Proposal concerning the right to joint ownership of firms' capital or profits.

5.B.5. Supply of employment and training for unemployed persons.

Lastly, the fact will be mentioned that a simultaneous tabling of two bills in the Lower House of Parliament took place at sittings of the House during 1984-85. The Minister of Labour tabled a bill on labour-market training and the Minister of Education tabled a bill on vocational further training. The two ministers had discussed co-ordination of the two measures before the bills were introduced.

The Minister of Labour's bill was discussed by the House's labour-market committee, which submitted its report on 15 May 1985. At its third reading on 28 May 1985, the bill was adopted unanimously, nem.con., and none of the members present abstained. The provisions of the law are discussed in detail in chapter 6.

The Minister of Education's bill was discussed by the House's education committee, which submitted its report on 15 May 1985. The bill was adopted, with 72 votes for and 66 against, at its third reading on 29 May 1985. The law was signed and published as law No.271 of 6 June 1985, with the title "Law concerning further training" and the sub-title "Vocational courses, etc.". The content of the Law is discussed in chapter 4 and control of this type of further training is discussed in chapter 6.

5.A.9. Proposal concerning joint title to firms' capital or profits

A proposal has been submitted from the workers' side that the so-called "industrial democracy" - which was evolved to some extent during the co-operation agreement - should be expanded into economic democracy, giving wage-earners a right to joint ownership. Economic democracy should confer joint ownership and spread the right of ownership so that capital and income are distributed more equitably.

This proposal was rejected by the employers' side. Following debates in the Lower House, the Minister of Labour appointed a committee which, after discussion of the possible forms, submitted a report on the question referred to as "LM" (lonmodtagernes medejendomsret - wage-earners' joint ownership) in the report.

The proposal was included by the Confederation of Trade Unions (LO) in the statement on the collective bargaining in 1978/79, but was again rejected by the Danish Employers' Association (Dansk Arbejdsgiverforening). The proposal was not included in the bill tabled by the Government in order to avert a major dispute, after the efforts of the official conciliator came to an end without result. The bill was adopted as the Law of 29 March 1979 concerning the extension of collective agreements, etc.

After the general elections to the Lower House on 23 October 1979, a minority government of Social Democrats was formed. At the first sitting of the House after the elections, the Prime Minister announced that it was the Government's intention to table a motion for the sharing of company profits on a compulsory, joint basis between the two sides, for the introduction of workers' joint ownership. At the same time, the Government wished to propose greater joint participation and co-determination for wage-earners.

A motion on workers' joint ownership and co-determination (introduction of profit-sharing) was tabled in the Lower House on 4 December 1979 by the Minister of Labour. After the 1st reading, the motion was referred to the Labour-Market Committee and it was stated in this committee's report that it had not been possible for Parliament to carry the part of the motion concerning profit-sharing. The Government therefore proposed that the proposal on profit-sharing should be removed from the motion; but it was stated that the Government would continue the discussions with the political parties, with a view to the formulation of concrete proposals on workers' joint ownership.

In May 1981, the Minister of Labour submitted a written report on workers' profit-sharing to the Lower House. The report was debated in the House on 21 May 1981 and Parliamentary support for the proposal could not be observed on this occasion, either.

During the 1981-82 session of the Lower House, no motion on profit-sharing was tabled for debate.

During the 1982-83 session of the House, the Social-Liberal Party tabled a motion on compulsory profit-sharing and joint ownership for employees. After the 1st debate in the Lower House, the proposal was referred to the Labour Market Committee - which did not submit a report on the proposal, however.

During the 1983-84 session of the Lower House, no motion concerning profit-sharing was tabled for debate.

During the 1984-85 session of the Lower House, the Social-Liberal Party again tabled the motion on compulosry profit-sharing and joint ownership for employees. After the 1st debate in the House, the proposal was referred to the policy & finance committee - which did not submit any report on the proposal, however.

During the 1985-86 session of the Lower House, two motions on profit-sharing were tabled. On 14 January 1986 the Social Democratic Party tabled a motion for a parliamentary resolution on joint ownership and co-determination (Introduction of profit-sharing), and on 12 February 1986 the Social-Liberal Party tabled a motion for a resolution on profit-sharing.

These proposals were debated together on 22 April 1986 and it was found that the proposals could not command a majority in the House. Generally speaking, the idea of profit-sharing was received sympathetically among the other parties and by the Government; but there was no support for the term "compulsory" or "obligatory" characterizing the proposals. The Minister of Labour stated, on behalf of the Government, that the Government opposes compulsory profit-sharing, but supports voluntary profit-sharing.

The two proposals were divided on the question of funds. The Social Democrats' proposal was that profits should be placed in local funds, whereas the Social-Liberal Party was in favour of the money being tied up in the firms as employee-capital, in a way such that the individual employee can have his share of the yield on the capital for himself.

Boths proposals for resolution by the Lower House were referred to the House's policy and finance committee for discussion, and the committee is expected to submit the report on its deliberations in June 1986.

The Social Democratic Party and the Social Liberal Party announced that they would try to draw up a joint statement on the principles for a future system of ED (economic democracy).

The Minister of Labour informed the House that a committee of government officials had been asked to submit a report on existing voluntary ED-arrangements. On the basis of this report, the Government would then give its opinion on voluntary profit-sharing in future.

Further deliberations have thus been postponed until the 1986-87 session of the Lower House, starting in October 1986.

5.8.5. Supply of employment and training for unemployed persons

To combat the effects of unemployment, in the 1970's a large number of special measures were implemented. Financial schemes were introduced, with government grants to county and local authorities. Some of these measures have become permanent to some extent, through the so-called 'introductory vocational training courses' which are discussed in chapter 4, namely those for combatting youth unemployment (introductory vocational training courses for young persons - EIFU) and those to combat unemployment among chronically unemployed adults - introductory vocational training courses for adults (EIFL). Both of these measures now have statutory authority in the above-mentioned Law concerning labour market training, Section VII, Preparatory vocational training courses.

The government which took office in September 1982, the Schluter-government, adopted the view that the crisis of employment was of a lasting nature and that it would therefore be preferable if the unemployed could be trained or re-trained for jobs that were in demand on the labour market. Consequently, attempts were made to build up the vocational training in accordance with estimates of future demand. See the discussion in chapter 8 on the new research initiative, which is intended to lead to regular provision of information on supply and demand on the labour market - the so-called 'National Planning Analyses'.

The two Bills which were tabled in the Lower House in October 1984

- the Bill concerning amendment of the Law on the supply of work for the unemployed, and
- the Bill concerning amendment of the Law on employment service and unemployment insurance, etc.

- must also be considered on the basis of this view.

The Bills were discussed in the Lower House's labour market committee. The debate consisted of discussions followed by questions put to the Minister of Labour and the Minister of Education for written reply. In addition, questions were put to the Prime Minister, who answered them in joint consultation. The committee received oral and written communications from a large number of organizations and

associations. To sum up, it can be said that there was a lot of criticism of the intentions behind the Bills, and political opposition in the committee was very strong.

The report from the labour market committee is itself very copious; in addition, all of the questions and answers will be sent out later in a special supplement. Finally, the following have been printed as annexes to the report:

- a list of the training courses offered, with good employment opportunities, including sections from the Minister of Education and the Minister of Labour

- geographical distribution of the training posts which, it is expected, can be made available for chronically-unemployed persons in 1985

- various statistical surveys on the expected demand for training posts for persons between 25 and 54 years of age who can no longer obtain offers of employment.

The opposition parties, the Social Democrats, the Socialist National Party and the Left-wing Socialists availed themselves of the right to have the parliamentary session lengthened, by submitting the required number of signatures of members of the Lower House. During the preparation of the Law, lengthened in this way, it was explained that it would

not be possible until 1988 for the economic effects to be exerted upon individuals in the form of reduced finacial benefits during unemployment, and in the meantime the laws are to be debated again during the 1986-87 session of the Lower House. The Minister of Labour announced at the end of 1986 that he wished to submit to the House data on practical experience and evaluations, with a view to providing the best possible decision-making for the review.

Both bills were passed in the Lower House on 14 June 1985.

The Law concerning the supply of work (arbejdstilbudsloven) was amended so as to enable persons over 25 years of age to take a course of training lasting up to 2 years, with payment during training equivalent to the daily unemployment benefit. At the same time, the opportunity was provided for chronically-unemployed persons to start a business of their own, with a start-up grant of about 52 000 kroner annually for up to 3½ years.

These schemes came into force on 1 July 1985. In the Minister of Finance's budget report, published in May 1986, it is stated that there have not been so many applications as expected for these schemes. In the second half of 1985, a total of 1189 persons started training with a training grant, 349 of whom were young persons under 25 years of age. In the same period, 409 persons started their own business

with a start-up grant; but some increase in interest could be detected here. Thus, in January 1986 a good 400 chronically-unemployed started a training course, and there were about 150 who started their own business with a grant.

It is also stated in the budget report that provision of a sufficient number of training courses for the chronically-unemployed was considered an important task. Special courses for chronically-unemployed persons were therefore established. However, it was found that the majority of those who had received a training grant began training in the ordinary training system, and applications for the special courses were very limited. Some of the planned courses have had to be cancelled for this reason.

Chapter 6. ADMINISTRATION OF VOCATIONAL TRAINING COURSES

Vocational training courses are the measures which prepare young people and adults for their participation in work in firms by which they earn their income. They cover a wide spectrum of measures, bounded on one side by the very comprehensive, long courses of higher education, and on the other side by the short periods of instruction in work which are directly linked to everyday working. In between are the relatively short updating and refresher training courses, which in Denmark typically consist of one or more modules of one course-week of 40 hours. In addition, there are the preparatory vocational courses (mentioned above as EIFU and EIFL), as well as apprentice and basic vocational training courses and technician training courses - all of between about one year and 4 years' duration.

The patterns of control of all of these measures are very varied, and control is often completely improvised and not bound by rules or regulations. This applies both to work instruction given in firms and to in-house training systems within firms, and to the courses provided by the trade unions out of their own funds. The courses provided by the technological institutions are also unbound by rules and regulations, unless they are experimental courses or courses under development which are to be included in the public training system.

Participation in control by the trade unions therefore also varies very widely in degree. Recognizing the importance of good work instruction, since World War II the unions have assisted the firms with courses of instruction, originally based upon British and American models - Training within industry, TWI (in Danish: Traening i arbejdsledelse, TIA).

At management-level, the unions have assisted in the development of management courses, and co-operation has been established within the scope of the Danish Management Center.

University courses and courses at the other institutions of higher education have a considerable degree of independence regarding subjects taught and arrangement of the courses. Discussion of this field is assumed to fall outside the scope of this report.

The key topic for this chapter and for the report as a whole is the publicly-subsidized vocational courses for training workers who are seeking employment or are employed on the private labour market.

In the following account, the basis used is the CEDEFOP-report of September 1981 concerning the financing of vocational training. Five key, governing concepts are stated

in the report, namely:

1. Economic and social policy and also employment policy.

2. Public control of decision-making on training policy.

3. The aims of training policy.

4. Public guidelines for those who draw up regulations for training policy.

5. Specifications for training qualifications.

Topics 1 and 2 are discussed separately below, whereas topics 3, 4 and 5 are discussed together.

re 1. Economic and social policy and also employment policy

The first-mentioned concept is the various overall policy provisions. It was shown at the beginning of chapters 1 and 2 how training policy in Denmark has come to be included in the whole overall policy laid down by the Government and by the Lower House of Parliament. Now, part of this policy is to try to achieve a balance between demand and supply of persons with the various training courses.

The latest development in this policy is that it will embrace both job-seekers and people who have become unemployed. The policy therefore consists of the following components:

1.a. Policy for schooling before decisions are taken on vocational training, or decisions regarding direct enrolment on the labour market without prior training.

1.b. Policy for the training of young persons and for the employment of young persons who have not been admitted to training courses.

1.c. Policy for training the chronically-unemployed.

1.a. Policy for schooling is laid down in the legislation on the primary and lower secondary schools and the ordinary additions to these. The Ministry of Education is the ministry responsible for the general education of children and young persons. However, the instruction takes place at local authority and private schools, and the local authorities, with their governing bodies for the education system, therefore have the main responsibility for the actual schooling. But alternative private schools co-exist with the primary and lower secondary schools and the immediate extensions to them; continuation schools and upper secondary schools are either exclusively private or local

authority-institutions - or in some cases, as for upper secondary schools, county authority-institutions. As from January 1986, upper secondary schools as State schools will be transferred to the county authorities.

1.b. Policy for the training of young persons is laid down in the legislation on basic vocational training. The ministry responsible for this legislation is the Ministry of Education, and a Directorate for Vocational Training has been established, with a comprehensive system of councils, committees and boards, which will be described later in this chapter.

Both apprentice training and basic vocational training are so-called 'alternance training', in which the young persons alternate between school and practical instruction in firms. The schools are private; but they are financed almost exclusively by government grants and loans, and they come under the above-mentioned controlling body - the Directorate for Vocational Training. The young people have to enter into binding training contracts with the firms. These training contracts have to be approved by a public authority, the employment office, which comes under the Labour Directorate, which in turn is under the Ministry of Labour.

Policy for the employment of young persons who have not been admitted to training is laid down in laws which authorize

grants for measures to employ young people. This legislation comes under the Ministry of Education and the Ministry of Labour, jointly; but it is assumed that the measures themselves will be implemented by county authorities and local authorities.

1.c. Policy for training of the chronically-unemployed is laid down in the legislation passed in 1985, which is an innovation. In addition, preparatory vocational training - which comes under the Ministry of Labour and is administered by the Directorate for Labour Market Training - continues to be provided.

re 2. Public administration of decisions on training policy

Public administration of decisions on training policy is carried out under the regulations contained in the above-mentioned legislation, or under ministerial regulations pursuant to the legislation. It has already been mentioned that the Ministry of Education and the Ministry of Labour have separately established directorates to administer the training measures which come under the two ministries:

a. The Directorate for Vocational Training under the Ministry of Education, and
b. The Directorate for Labour Market Training under the Ministry of Labour.

Both directorates are manned by generally-qualified engineers and technicians and by personnel with financial and administrative qualifications, and both extend over training for virtually the whole Danish economy. Later on in this chapter, there will be a brief discussion of the question of access to information concerning the specifically technological developments, which usually has to be sought outside the Directorates.

Under the legislation, both Directorates are obliged to use councils, commissions, boards and committees. A brief survey of this structure will be given below for each directorate.

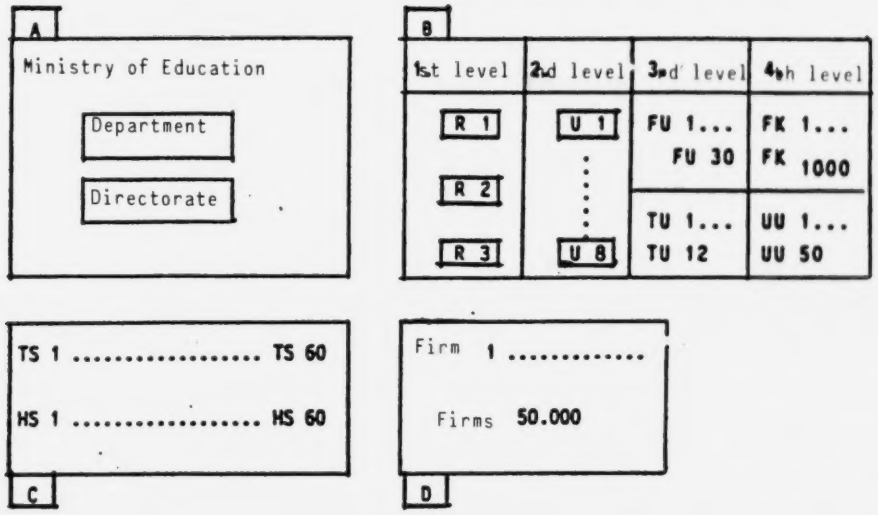


Fig. 6.2. Advisory councils, boards and committees for the Directorate for Vocational Training.

The advisory bodies are arranged in a hierarchy consisting of 4 levels - cf. diagram above, block B.

The diagram shows 4 blocks, as follows:

Block A is the Ministry of Education, in which the Department and the Directorate for vocational training are entered.

Block B shows, as already mentioned, the advisory bodies distributed between the 4 levels. These levels and the advisory bodies are discussed below.

Block C shows vocational schools under the Ministry of Education's Directorate for Vocational Training, i.e. about 60 technical schools, shown as TS 1 to TS 60, and about 60 business schools, shown as HS 1 to HS 60.

Block D shows the firms, of which there are many thousands. The arbitrary figure 50 000 is used here, shown as Virks. 1 to Virks. 50 000.

The diagram shows only the blocks and not the connecting lines. A sketch in which some of the main connections are entered is given below (Fig. 6.3.). The sketch embraces blocks A, B and C.

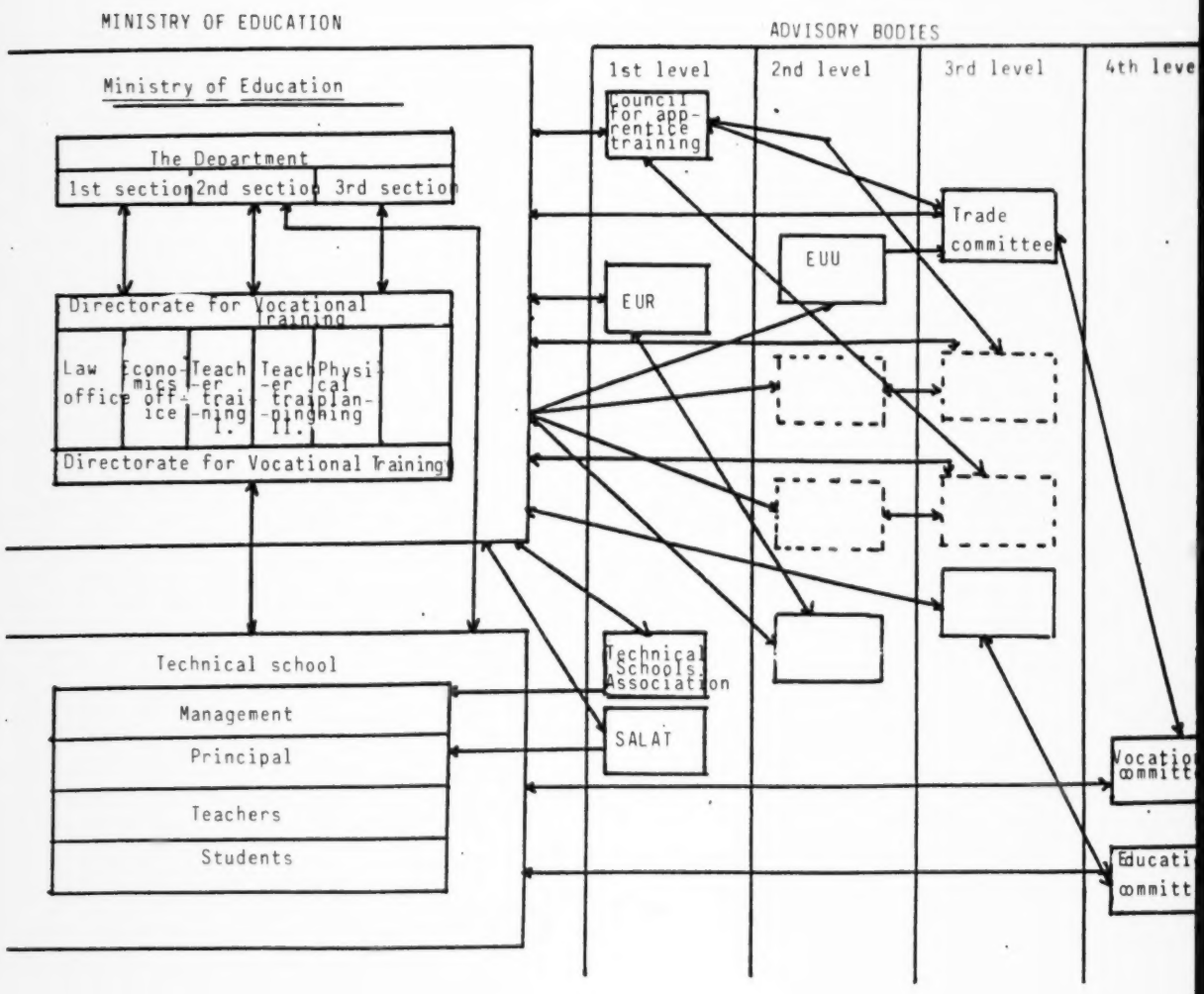


Fig. 6.3. Examples of lines of communication for contacts to and from the advisory bodies for vocational training under the Ministry of Education - the technical schools, here.

At top left in this diagram, the organization of the Directorate for Vocational Training is shown. Under the Director there are 5 offices - one legal, one financial, two pedagogic (teacher training) and one for physical planning.

Below the Directorate, the organization of a technical school is shown. It has 4 levels, namely: managing board, principal, teachers and students.

In the right-hand side of the diagram are shown the 4 levels - the same as in Fig.6.2. At level 1, besides the Council for Apprentice Training (laerling rådet) and the Vocational Training Council (erhvervsuddannelsesrådet, EUR), are the Technical School Association and the Association of Heads of Technical Schools (SALAT). At level 2 are the vocational training committees (EUU) and a committee for technician training (Teknikerudvalget).

In the diagram a number of examples of interconnections between the advisory bodies are entered, and between these and the Directorate and the Ministry, and also connections with the technical schools.

At level 1 are 3 advisory councils:

- Council for Vocational Training
- Council for Apprentice Training
- Advisory Council on Training for the National Teacher Training Institution

The tasks for these advisory councils are laid down in the legislation.

In the above-mentioned councils there are members appointed by the labour market-organizations and appointees from the Ministry of Education and Ministry of Labour. Other organizations are represented also. The detailed composition can be changed at any time.

At level 2 there are 8 vocational training committees - one for each of the 8 training areas. These committees make recommendations to the Directorate concerning both basic vocational training and the corresponding apprentice training. They also make recommendations concerning certain basic technician training schemes. The Technician Training Committee (Teknikerudvalget) is the co-ordinating body for technician training.

The administrative office services for both the three councils and the 8 vocational training committees are provided by the Directorate.

At level 3 there are the vocational committees and the technician training boards.

The work of the vocational committees is laid down in the Law concerning apprentice matters and the Law concerning basic vocational training, and also in a promulgation on admission and on training contracts, etc., for students on basic vocational courses - the 'retsbekendtgorelse', as it is called.

Whereas administrative office functions for the technician training boards are attended to by the Directorate, for the vocational committees they are performed by the committees themselves, in consultation with the organizations represented.

The duties of the vocational committees under the Law concerning apprentices are to advise the Ministry of Education and the Council for Apprentice Training on all matters relating to apprentice training and protection. The committees make recommendations on training-rules to guide the firms which accept apprentices for training, by specifying the disciplines and tasks in which the apprentices are to be trained. The vocational committees approve firms which wish to be authorized to train apprentices.

The duties of the vocational committees under the Law concerning basic vocational training are closely related to those which are laid down in the Law concerning apprentices:

> They make recommendations on the vocational aims and content of the training and on guidelines for on-job training periods, and they approve the firms providing on-job training. In addition, they have the task of commenting on proposals to establish apprentice training courses and of granting exemption from the provisions of the Law concerning basic vocational training and training certificates.

About 30 vocational committees exist, some of which are joint vocational committees covering several vocational areas.

There are about 10 technician training boards, and their number is being increased in step with the expansion of technician training. Level 4 is at the schools. Here there are vocational committees for apprentice and basic vocational training and committees for technician training.

This account has dealt with the situation for the technical training schemes. A similar structure exists for the commercial and clerical training schemes.

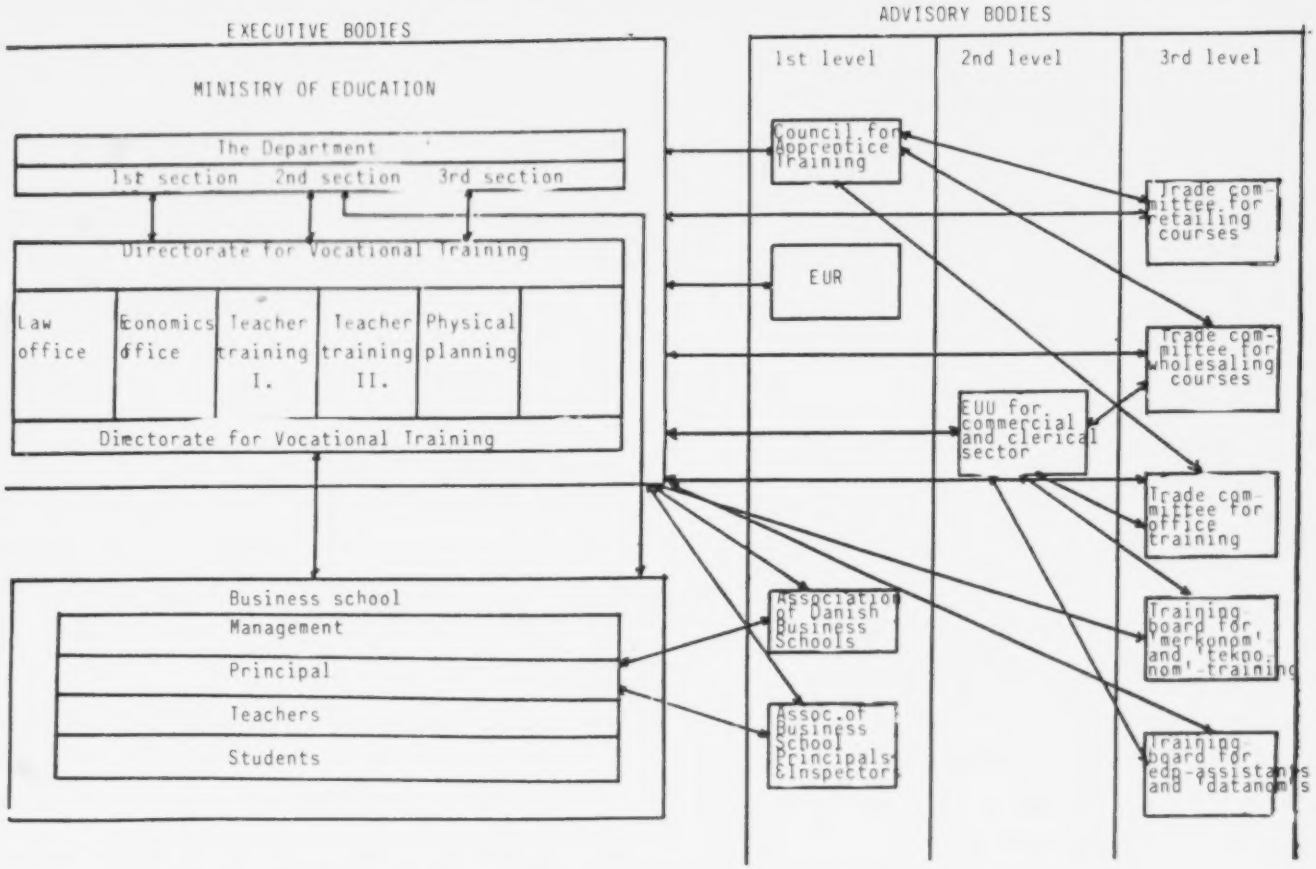


Fig. 6.4. Examples of lines of communication for contacts to and from the advisory bodies for vocational training schemes under the Ministry of Education - the business schools, in this case.

In the diagram, Fig. 6.4., the organization of the Directorate for Vocational Training is again given at the top. Under the Director there are 5 offices: one legal, one economic (financial), two pedagogic and one for physical planning.

Below the Directorate, the organization of a business school is shown. Like the technical school, it has 4 levels, namely: managing board, principals, teachers and students.

In the right-hand side of the diagram, three levels - the same as those in Fig. 6.2. - are shown. At level 1, besides the Council for Apprentices and the Council for Vocational Training (EUR) there are also: the Danish Business Schools Association and the Association of Business School Principals and Inspectors. At level 2 are the vocational training committees (EUU) for the commercial and clerical sector.

At level 3 are the vocational committees and the training boards.

At level 4 - i.e. at the schools - there are vocational committees and education committees, as for the technical schools (these committees are not shown in the diagram).

The review of the advisory bodies for technical training schemes is continued below.

National Vocational Teacher Training Institution

For the National Vocational Teacher Training Institution (Statens erhvervspaedagogiske laereruddannelse, SEL), administration is rather different.

Here, as for vocational training, there is an overall training council; but the composition is different. It includes SEL's principal, who is chairman, and the following members who are appointed by the Ministry of Education:

- 4 members, in consultation with the organizations representing the teachers at the schools under the Directorate for Vocational Training;
- up to 5 members who are particularly knowledgeable in general paedagogics or teacher training.

A draft ministerial order concerning the SEL is awaiting comment from the Council for Vocational Training. The Council has appointed a committee including representatives from, for example, educational and industrial organizations, to consider the matter. This committee wishes first to study the question of teacher-qualifications in general and has appointed two sub-committees representing viewpoints concerning business schools and technical schools,

The principal of the SEL takes part in the meetings of the above-mentioned committees.

Corresponding to level 2 in the administration of vocational training, there are two training committees for the SEL as advisory bodies for training courses for teachers at technical schools and business schools, respectively.

Finally, corresponding to level 3 there are a number of course committees as advisory bodies for the various categories of training activity in the SEL.

Both training committees and course committees are composed of representatives of teachers' organizations, school principals and the Directorate for Vocational Training.

Advisory councils and committees for the Directorate for Labour Market Training

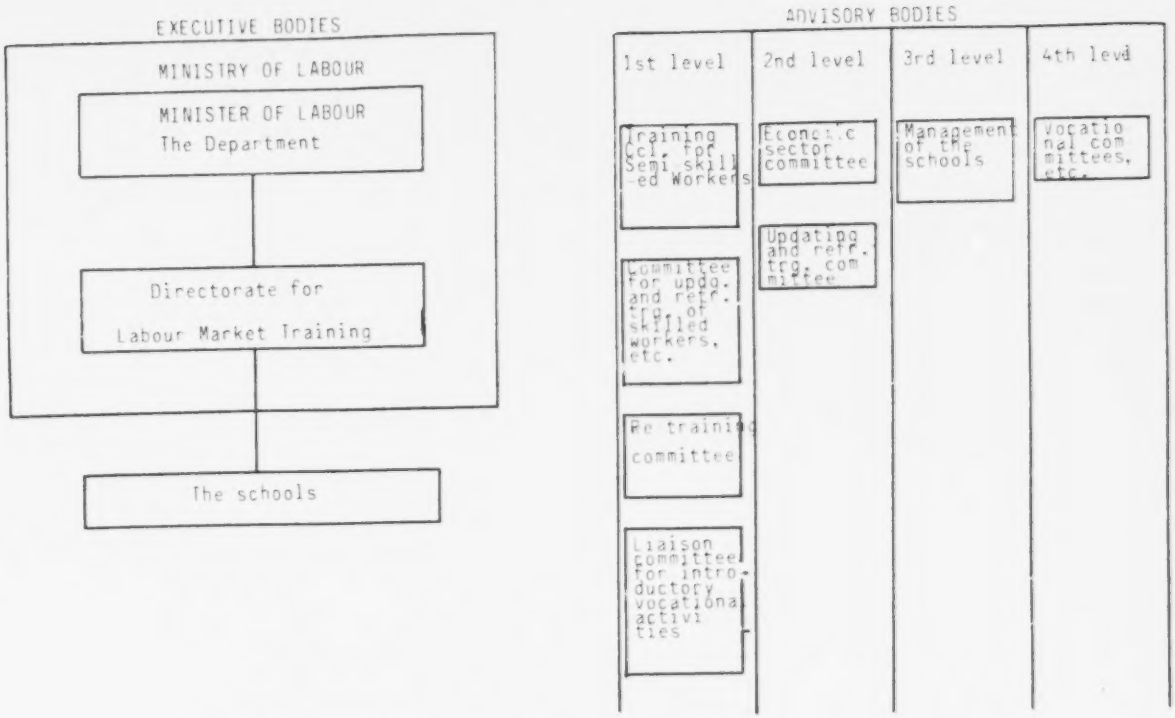


Fig. 6.5.A. Administration of labour market training prior to 1 July 1986.

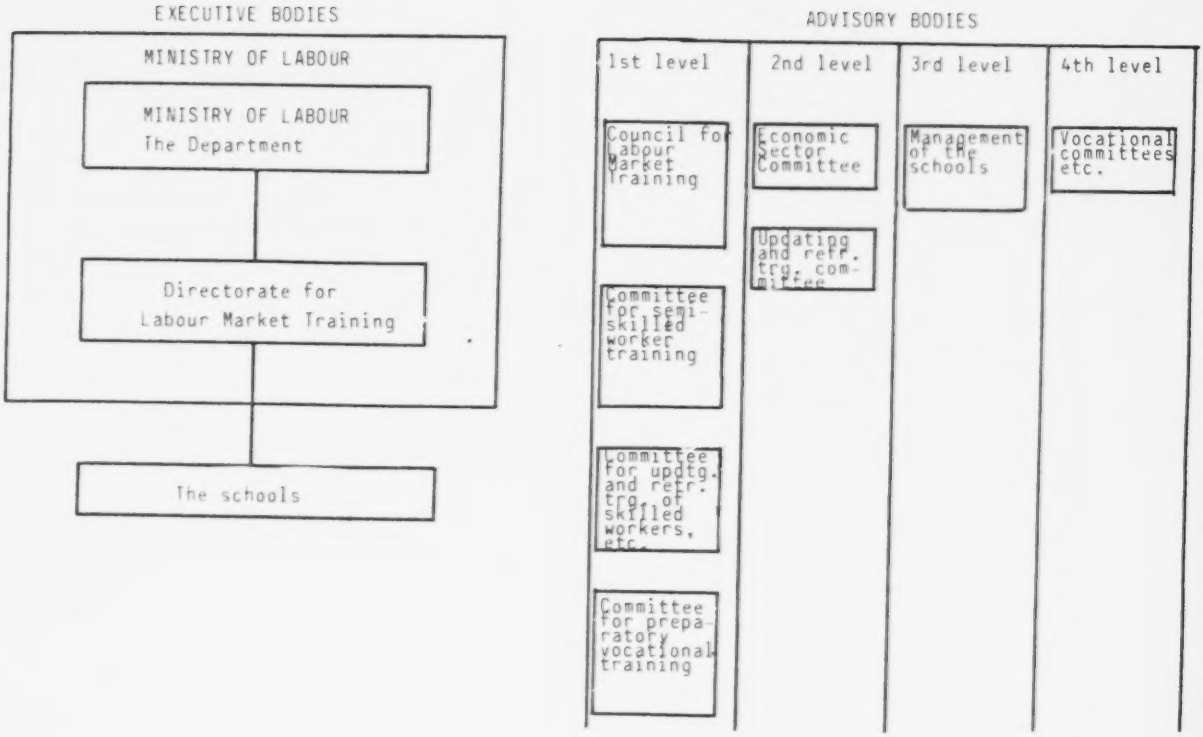


Fig. 6.5.B. Administration of labour market training after 1 July 1986.

As from 1 July 1986, the administration of labour market training will take place in accordance with Law No. 237 of 6 June 1985 concerning labour market training. Under this law, some changes take place in the overall administration,

illustrated in the two figures - Fig. 6.5.A., which shows overall administration up to 1 July 1986, and Fig. 6.5.B., which shows the new system of administration. The changes that are taking place in the advisory bodies and their composition are discussed here.

Until 1 July 1986, as shown in Fig. 6.5.A. a training council for semi-skilled workers existed, working at level 1 in co-ordination with three committees, namely the committee for updating and refresher training of skilled workers, etc., the re-training committee and the liaison committee for introductory vocational activities. At level 2 are the industry (trade) committees for semi-skilled worker-training and the vocational committees for updating and refresher training, which deal with the updating and refresher training of skilled workers, etc. At level 3 is the schools' management and at level 4 vocational committees, etc.

The committee for updating and refresher training of skilled workers, etc., was formed in accordance with a circular of June 1965.

The re-training committee was set up under a law concerning re-training.

There are representatives for the labour market-participants

in all of these bodies. The administrative office functions for the responsible bodies are attended to by the Directorate for Labour Market Training. The industry or trade committees - which report to the training council - have no governmental representatives.

After 1 July 1986, a training council for labour market training is being established at level 1, consisting of a chairman appointed by the Minister of Labour and 8 members appointed by the Confederation of Trades Unions, and also 8 members appointed by the Danish Employers' Association (Dansk Arbejdsgiverforening). The council advises the Minister of Labour on matters common to all labour market-training schemes. In addition, the council can on its own initiative discuss and make recommendations to the Labour Minister on matters which, in the council's view, are of general or fundamental significance for labour market training. As an innovation, it must be possible to introduce labour market training for groups other than those which have hitherto received training under the labour market-courses. The training council is to have an opportunity to comment upon the introduction of labour market training for these new groups.

The new law also opens up access to other new training initiatives, e.g. the introduction of courses against payment, within the area of the law applying to publiic or private institutions and firms, and to organizations. The

training council is to have an opportunity to comment upon these initiatives before they are implemented.

At level 1 in Fig. 6.5.B. there are also three committees which deal with (a) training measures for semi-skilled workers, (b) updating and refresher training of skilled workers, etc., and (c) preparatory vocational training. The two first-mentioned committees will have the same composition, namely: a chairman appointed by the Minister of Labour and 8 members appointed by the Confederation of Trade Unions and 8 members appointed by the Danish Employers' Association. Also, each committee is to have appointed to it 2 representatives of the Ministry of Labour, 1 representative of the Ministry of Education and 1 representative of the Ministry for Industry.

The training committee for preparatory vocational training will have a chairman appointed by the Minister of Labour, 3 members appointed by the Confederation of Trade Unions, 3 appointed by the Danish Employers' Association and, 2 by the Minister of Labour, 1 appointed by the Minister of Education, 1 appointed by the Association of Danish County Councils (Amtsrådsforeningen i Danmark), 1 appointed by the National Association of Local Authorities (Kommunernes Landsforening) and 1 member appointed jointly by Copenhagen borough council and Frederiksberg borough council.

The structure at level 2 and succeeding levels is unchanged from the situation prior to 1 July 1986.

re 3, 4 and 5 The aims for training policy, guidelines for training regulations and specifications for qualifications

For the training schemes which come under the two above-mentioned Directorates, the aims for the various courses are laid down in syllabuses which otherwise describe the conditions of admission, the content of the teaching and vocational disciplines and also the requirements regarding training of the teachers and classrooms and workshops, as well as equipment and teaching aids.

The part of the training which takes place in firms must satisfy the requirements contained in the training rules. These are laid down by the Council for Apprentices in accordance with recommendations from the vocational committees.

A factor crucial for the quality of the syllabuses is their preparation before they are submitted to the advisory bodies.

General appraisal of administration methods

It will have been seen from the above account of administration within the two Directorates that a strong tradition of set forms of organizational participation has evolved. There are many advantages in this. A thoroughness in the preparation of new training rules is achieved in this way and they are accepted by the organizations which represent the firms and the employees in these firms.

There may, however, be a need to ensure that the way is clear for new impulses to influence the training. This is already largely taking place, since a tradition exists of consulting experts in areas of newer technology and on similar difficult topics. This can often be done as part of the normal routine of preparation of new syllabuses or review of existing syllabuses.

Inclusion of the expenses of consulting specialists is sometimes allowed, in the budgets which are submitted to the advisory bodies and to the two Directorates. Thus, it is common practice to seek advice from the technological institutions and on the engineering training courses at the Danish Technological University, the Danish Academy of Engineering Sciences and the business schools.

Chapter 7. FINANCING OF VOCATIONAL TRAINING

7.1. Financing-model

The main reference source for this chapter is Else Kofoed's report "Financing of vocational training in Denmark, May 1984" (Finansering af erhvervsuddannelse i Danmark, maj 1984). Else Kofoed has used in her report the method from the CEDEFOP-report "The financing of vocational training in the European Community" by Keith Drake and Werner Rasmussen, September 1981.

A general financing model from this report is reproduced below, showing the flows of funds from contributors via the collecting and distributing bodies to the users, which are schools, etc., and the training departments of firms. The sources and progress of these flows of funds can be changed by political decisions. Examples are given below of fundamental changes in this progress, applying to the financing of training for apprentices and bvt-students. It had been found difficult to procure a sufficient number of training posts for apprentices and on-job training posts for bvt-students. In order to induce firms to undertake training functions earlier, by taking on apprentices and/or on-job bvt-students, a scheme of government grants was introduced for firms taking on these trainees. After these grants had been paid out for a few years by the Exchequer, the grants were allowed to be paid out by the Employers' Student Training Reimbursement Fund (Arbejdsgivernes Elevrefusion,

AER), the money for which was provided from dues paid in by the firms (see discussion of AER later in this chapter).The national budget was relieved of a burden by this change-over.

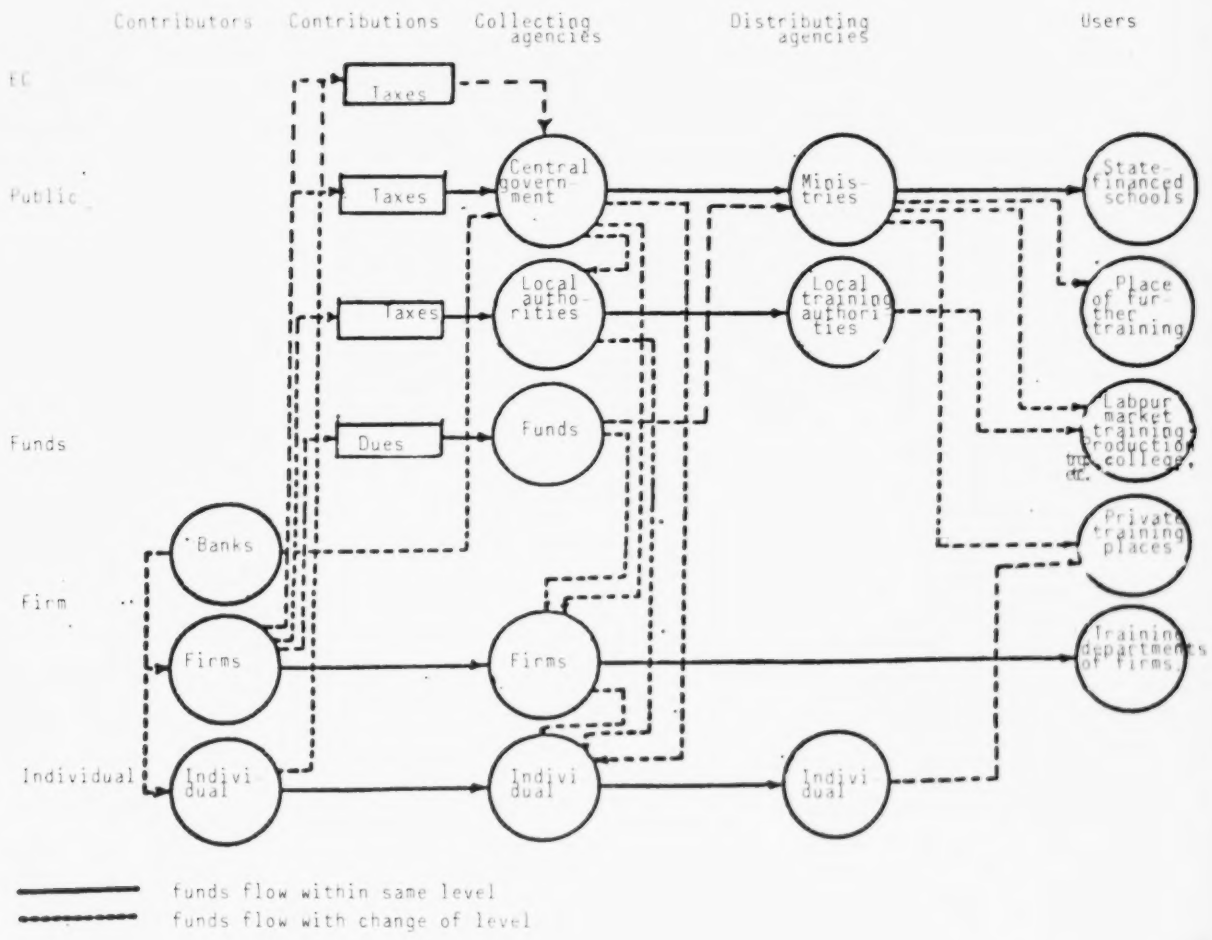


Fig. 7.1. Financing model

7.1.1. Review of the financing of the different types of vocational training

In chapters 3 and 4 in this report, a description of vocational training schemes is given. In this chapter an account will be given of the financing of these training schemes. The description will show that contributions come from all of the bodies entered in Fig. 7.1., namely:

EC
public monies
funds
firms
individuals.

However, these sources come into the picture in varying degrees in the different phases of vocational training (academic periods and practical periods) and for the different types of vocational training. In addition, as mentioned in sub-section 7.1. changes have taken place in the forms of finance: government grants have been introduced and replaced subsequently by grants from funds. The EC-grants occupy a special place which is described below under the heading 'Grants from the European Social Fund'. An outline review is given below of financing of the various types of vocational training, for:

- apprentices
- bvt-students
- semi-skilled workers

- students on EIFU-courses
- students on EIFL-courses
- participants in employment-projects
- students on technician training courses.

Apprentices

Apprentice training is alternance training , i.e. the students alternate between school and practical work in firms (training-places).

Under the Law concerning apprentices (Law No. 261 of 2 October 1956), at the start of an apprentice training course a training-contract is concluded between master craftsman and apprentice (and the latter's guardian, if the apprentice is under 18 years of age). The contract must be approved and registered by the employment office. The apprentice receives a wage throughout his training, including school-time. The wage is fixed by agreement between the labour market-participants within the individual trades and industries. If the apprentice lives in the school hostel during schooling, he or she pays a daily fee for board and lodging.

In general, the wage for apprentices and BVT-students is high in Denmark, compared with a number of other countries. But the wage varies extremely widely according to the main

industrial or trade sector concerned. In addition, the wage can vary with the age of the young person - under or over 18 years - at the commencement of the training contract, or according to the progress made by the young person in the period of apprenticeship or practical work experience.

The firm receives reimbursement for expenditure on wages during training from a fund - the Employers' Student Training Reimbursement Fund (AER) - the work of which is discussed below.

In order to encourage firms to offer training posts, the Government has made grants to the firms. In 1985, these grants amounted to 30 000 kr. for each training post. The grants were introduced in 1978. During the years 1978-81 they amounted to 16 000 annually, and in 1982 they were increased to 30 000 kr. annually.

In the first few years following the introduction of the grants scheme, the grants were paid out by the county authorities, which were reimbursed by the government. The county authorities are still paying out grants for training contracts entered into before 1 July 1984.

As from 1 July 1984, the financing of grants for firms was transferred to the Employers' Student Training Reimbursement Fund (AER), and government grants ceased.

Financing of the schools' work takes place through grants paid out by the Government. Up to and including 1984, 20 p.c. of government expenditure on apprentice training was refunded by the county authorities; but this contribution ceased as from 1985 inclusive, after which the net expenditure on apprentice training was met in full by the Government.

Bvt-students

Bvt-training is alternance training, which starts with the so-called 'basis-year' in which the student receives training at the vocational school only. In this period the student does not receive a wage. Up to 1985 inclusive, however, bvt-students in the basis-year received government assistance from a special fund. This assistance is now being wound up and will stop completely with effect from 1986. After this, bvt-students are being told to apply for assistance from Government Training Aid (Statens Uddannelses-stotte), which is financial assistance depending upon the social income of the parents.

After the basis-year the student alternates between school and practical work in the firm. Under the training contract with the firm, the student receives a wage from the firm for the remainder of the training period, including the school periods; but the firm receives - in the same way as for apprentices - reimbursement of wage expenditure during

school periods from the AER, the work of which is discussed below.

In order to encourage firms to offer on-job training posts, the Government has made grants to the firms. These grants amount to 30 000 kr. for every new on-job training post, but only 18 000 kr. if the period of practical work experience is 1½ years or less (see also above regarding grants to firms which offer training posts for apprentices).

The schools receive grants from the Government both for expenditure on basic training and for the subsequent schooling which is included in bvt-training.

Special grant schemes for establishing special apprentice and on-job training posts (LOP-posts)

In the years 1978-80 a special grants scheme existed for setting up special apprentice and on-job training posts in central government and local government administrations and institutions.

100 p.c. refund of wages was granted for establishing 500 posts annually in the central government administration, and 50 p.c. refund of wages for the special establishment of apprentice and on-job training posts in county authority- and local authority-administrations. These grants schemes

were in principle restricted to on-job training posts covered by the Law concerning apprentices and the Law concerning basic vocational training; but the schemes were gradually extended to embrace practical courses as part of technical training - as laboratory assistants, for example.

During the years 1982-84, these schemes were replaced by public contracts. The Law concerning grants financed by county authorities and by the central government was changed as from 1 July 1984 to financing through the AER. The grants scheme was financed by an employer's contribution of 29 øre an hour. The employer's contribution was previously 24 øre an hour to cover the refund of wages, i.e repayment of wages paid out during the students' period at school.

As from 1 January 1986 the grant was changed from 30 000 kr. per training contract to 15 000 per contract. In special cases, however, 30 000 kr. can be paid out in grants, namely for contracts set up for girl trainees within the basic metal industries, for contracts in firms which have not had contracts within the last five years and for contracts with young unemployed persons over 25 years of age who are entitled to job offers.

In 1985 the AER paid out 593m kr. in grants, divided between about 16 000 bvt-students, about 11 000 apprentices and

about 3 600 other on-job training contracts - mainly in agriculture.

As a special arrangement, a research-project was initiated by the vocational schools with a view to procuring apprentice and on-job training posts. A good 12m kr. was spent annually within this sphere in the years 1982-86.

Semi-skilled workers

Students at schools for semi-skilled workers receive wages for loss of earnings whilst they are attending school. Participants who have attained their 18th birthday are entitled to payment for loss of earnings or job opportunities, equivalent to the highest rate of daily benefit in the Government-approved unemployment insurance fund to which they belong, or could have belonged. This does not apply to self-employed persons or assisting spouses, however. If a participant has had a higher average daily income than the daily benefit rate in the last four weeks prior to enrolment, the participant is paid the equivalent sum; but the total remuneration cannot exceed 125 p.c. of daily benefit. Payment for loss of earnings is financed by the Government.

The running expenses of the semi-skilled worker schools are paid by the Government and this government expenditure is

refunded annually as a lump sum from the Labour Market Training Fund (Arbejdsmarkedets UDdannelsesfond, AUD) - see below.

Students on EIFU-courses

All students who participate in EIFU-courses are entitled to assistance. This is paid by the Government and in 1985 it amounted to 450 kr. weekly for course participants under 18 years of age and 650 kr. weekly for those over 18. This aid is paid out also while the students are having practical work experience in firms. Participants who are entitled to receive daily unemployment benefit can retain this entitlement and social security benefit can be continued during the course.

EIFU-courses are held at the semi-skilled worker schools and the relevant expenditure is financed by the Government and refunded by AUD.

Students on EIFL-courses

No form of personal assistance-scheme exists for these courses, except for a travel allowance. However, participants who are entitled to receive daily unemployment

benefit retain this entitlement during the course, and social security benefit can be retained also. The majority of the students are chronically-unemployed persons entitled to daily unemployment benefit.

EIFL-courses are held at semi-skilled worker schools and the relevant expenditure is financed by the Government and refunded by AUD.

Participants in employment-projects

Participants in these projects receive wages which are calculated as normal agreed wages for equivalent work. The wages are paid by the local or county authorities - which, however, receive full or partial reimbursement from the national exchequer. The same applies to actual expenditure on execution of the projects.

Students on technician training

The students who participate in technician training courses which are held only at the schools are obliged to seek aid through the National Training Fund (Statens Uddannelses-støtte).

The students who participate in technician training courses

which consist partly of practical work experience in firms receive wages during these work periods. These wages are paid by the firms.

The running expenses of the schools are paid from the national exchequer.

7.2. Sources of finance for vocational training

7.2.1. Financing directly from taxation

Public financing of vocational training takes place with central government- and local authority-taxation as sources, the payers of which are individuals and firms. These taxes are collected by the Government, from which they flow to the distributing agencies - primarily the Ministry of Education and the Ministry of Labour; also the county and local authorities.

7.2.2. Government expenditure on vocational training

Appropriations to cover Government expenditure on vocational training appear each year in the Budget estimates, defined in more detail in chapter 20 of the Finance Act concerning vocational training under the Ministry of Education, and in

chapter 28 concerning vocational training under the Ministry of Labour. The salient figures for these appropriations are given in table 7.1.

Table 7.1. Government expenditure on vocational training etc. Ministry of Education and Ministry of labour

Million kr.	Finance year				Budget
	1979	1983	1984	1985	1986
Ministry of Education					
Vocational training courses, etc.					
Running expenses	793,6	1.622,8	1.998,8	2.188,8	1.879,6
Income	39,6	55,4	87,3	77,8	85,9
Grants	653,1	1.258,7	1.514,1	1.343,3	1.556,9
Ministry of Labour					
Semi-skilled worker training	268,5	819,0	837,3	970,5	885,3
State schools for semi-skilled workers	24,9	57,5	53,8	57,5	55,7
Trade training of semi-skilled workers	18,7	11,1	8,5	9,6	8,5
EIFU	53,5	160,9	147,3	157,8	159,2
Updating and refresher trg.of skilled workers	106,9	374,4	354,3	433,3	424,0
Re-training	8,9	7,9	4,2	10,1	14,5
Re-integration training grants	605,0	2.266,2	2.292,6	2.581,0	2.115,0
EIFL	6,9	)	45,0	46,3	34,2
Courses for women	4,6	45,9)			
AUD - running expenses		)		24,5	16,5
- income			1.744,7	1.520,0	1.460,0

Note the large increases in the appropriations for both ministries in the years included in the table, 1979-86.

The budget figures in table 7.1. show the expenditure of the Ministry of Education and Ministry of Labour on vocational training, etc., in the years 1979, 1983, 1984, 1985 and the Budget estimates for 1986.

In the Notes to the Finance Bill there are estimates of expenditure per trained student.

Thus, in the Finance Bill for 1986 the following figures appear for expenditure per trained student in 1985, for the basic vocational courses within the 8 main sectors:

	Apprentices	Bvt-students
	kr.	kr.
Commercial and clerical	13 400	24 537
Building and construction	44 737	101 016
Basic metal industries	48 149	79 124
Graphical and allied trades	62 575	127 567
Food	39 807	56 717
Agriculture	25 108	96 549
Land transport	-	79 737
Service trades	52 011	44 664

These summary figures show that government expenditure per trained student is in most of the sectors much higher for bvt-students than for apprentices. The main reason for this is that the total time spent by bvt-students at the vocational schools is much longer than that spent by apprentices.

By comparing the training for bvt-students with that for apprentices, one will also note dropping-out and transfer to

other courses, etc. The drop-out rate for apprentices during apprenticeship is of the order of 10-15 p.c. For bvt-students, elucidating dropping-out is rather more complicated. It is composed of three forms of 'dropping-out', namely:

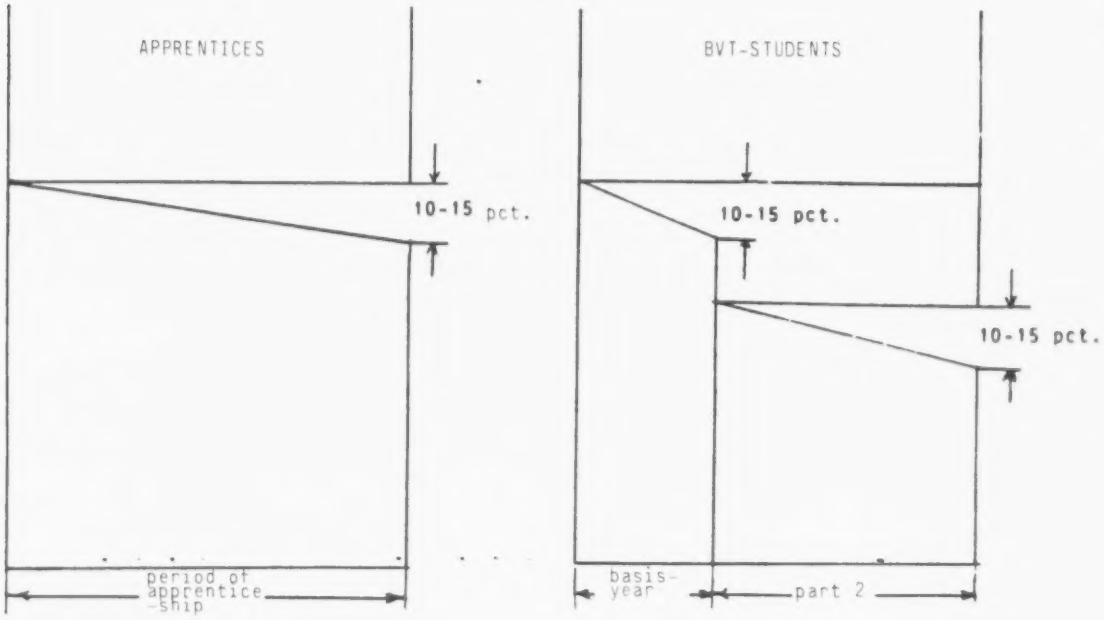
a) Dropping out during the basis-year. On average, this is of the order of 10-15 p.c.

b) Dropping out after the basis-year is completed, but before the remaining training-time is commenced within the selected vocation. The difficulty of obtaining on-job training posts is a factor here. In addition, however, there are in principle two other forms of 'dropping-out':
   - transfer to apprentice training
   - transfer to shorter further training.

   These 'drop-outs' total about 25-30 p.c., but vary from one main sector to another.

c) Dropping out during part 2 of bvt, after the student has obtained an on-job training place. On average, this amounts to about 10-15 p.c.

The drop-out proportions for apprentices and bvt-students can be illustrated by the sketches below:



7.2.3. Grants from the European Social Fund

Grants from the European Social Fund are made as grants for a number of vocational training-measures, in accordance with Council decisions as stated below.

During the ten-year period 1973-82, the Social Fund granted a total of 1 165m kr. to Denmark. The grants do not go directly to the different training-measures or to the distributing agencies which otherwise apportion funds between the measures concerned. The grants go into the

national exchequer and from there are set off in the budgets and budget accounts of the distributing agencies. A summary is given below of grants from the European Social Fund to Denmark in the ten-year period 1973-82:

	Mill.kr.
1. Adaptation-measures for migrants and their families	22
2. Special measures to promote vocational training and employment of unemployed young persons	300
3. Vocational training of women over 25 years of age who are seeking work	6
4. Special training-measures for the unemployed, for workers under threat of unemployment or under-employed persons in regional development areas:	
a. Grants for the population of Greenland	297
b. Vocational training of unemployed workers and workers under threat of unemployment in regional development areas	167
5. Training-measures for unemployed workers and workers under threat of unemployment from groups of firms in chronic difficulties	46
6. Vocational integration of handicapped persons	327
Total	1 165

7.2.4. Financing from funds

7.2.4.1. AER - Employers' Student Training Reimbursement Fund

AER (Arbejdsgivernes elevrefusion) was established by law on 1 July 1977 for the purpose of refunding all or part of the wages paid to apprentices or students during their school period. The background to this statutory initiative was the provision in the Law concerning basic vocational training, passed at the same time, that besides paying the students wages during their practical work experience, firms should pay wages during the school period in part 2 of the training covered by the training contract between the on-job training firm and the student. This new reimbursement scheme was created in order to avert the effects of this additional obligation for the firms concerned. Besides this, there was the desire to procure the necessary number of on-job training posts.

It was provided in the Law that the AER-scheme should be financed by contributions from all private employers, i.e. without grants from public funds. The collected contribution to the scheme should be proportionate to the total work-force of the individual firm. The AER-scheme thus embraces all private employers, who both finance the scheme and receive reimbursement from it.

Regarding financing otherwise, it may be mentioned that total income from contributions in 1983 amounted to about 412 million kroner, collected quarterly from 133 000 employers. The individual employer's contribution is calculated on the basis of the previous quarter's paid-in ATP-contributions (ATP = Labour-market supplementary pension) and is a fixed sum per hour of employment for all employees of the firm. For the year 1984, the contribution rate for the AER-scheme amounted to 432 kr. per all-year-round employee

Fund flows and firms

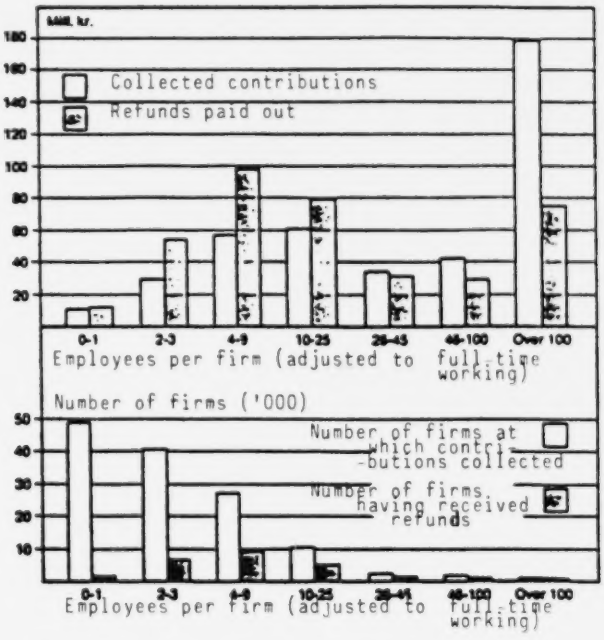


Fig. 7.2. Contributions collected and refunds paid out in 1983, by firm-size.

Table 7.2. Reimbursement of employers through AER in the years 1981-84, by main economic sectors

ECONOMIC SECTOR	BVT-STUDENTS*)		APPRENTICES		T O T A L	
	Number	Mill.kr.	Number	Mill.kr.	Number	Mill.kr.
COMMERCIAL & CLERICAL						
1981	14.000	30,4	4.200	14.8	18.200	45,2
1982	13.500	33,7	3.600	12,7	17.100	46,4
1983	13.700	37,1	3.700	15,7	17.400	52,8
1984	14.000	40,5	3.800	16.8	17.800	57,3
BASIC METAL INDUSTRIES						
1981	3.500	29,1	15.800	82.7	19.300	111,8
1982	4.400	39,9	14.900	84.8	19.300	124,7
1983	5.200	51,0	14.300	90.4	19.500	141,4
1984	6.400	61,9	13.600	92.4	20.000	154,3
BLDG. & CONSTRUCTION						
1981	2.400	18,1	13.500	68.9	15.900	87,0
1982	2.400	20,1	12.500	71,4	14.900	91,5
1983	2.500	22,5	11.100	71,5	13.600	94,0
1984	2.800	23,1	10.700	74,7	13.500	97,8
GRAPHICAL & ALLIED TRADES						
1981	700	5,0	500	1,9	1.200	6,9
1982	800	7,0	600	2,9	1.400	9,9
1983	800	7,7	600	2,9	1.400	10,6
1984	1.100	8,7	600	3,3	1.700	12,0
SERVICE						
1981	1.100	9,0	1.100	7,3	2.200	16,3
1982	1.600	14,3	400	1,8	2.000	16,1
1983	2.000	20,1	200	0,9	2.200	21,0
1984	2.500	25,1	200	0,9	2.700	26,0
FOOD						
1981	400	3,3	4.400	22,3	4.800	25,6
1982	500	4,0	4.800	26,0	5.300	30,0
1983	600	6,4	5.000	30,9	5.600	37,3
1984	700	7,1	5.300	35,4	6.000	42,5
AGRICULTURE						
1981	1.300	18,2	500	3,8	1.800	22,0
1982	1.200	18,3	500	4,5	1.700	22,8
1983	1.200	20,7	500	4,8	1.700	25,5
1984	2.000	32,1	600	4,9	2.600	37,0
LAND TRANSPORT						
1981	100	0,6	-	-	100	0,6
1982	100	0,7	-	-	100	0,7
1983	200	1,5	-	-	200	1,5
1984	300	2,2	-	-	300	2,2
T O T A L						
1981	23.500	113,7	40.000	201,7	63.500	315,4
1982	24.500	138,0	37.300	204,1	61.800	342,1
1983	26.200	167,0	35.400	217,1	61.600	384,1
1984	29.800	200,7	34.800	228,4	64.600	429,1

*) Incl. students treated on the same footing.

It will be seen from the above diagram (Fig. 7.2.) that the smaller firms generally benefit most from the scheme, since as a whole they receive more in refunds than they pay in contributions. The diagram also shows that many smaller firms have no student-trainees or apprentices, by the fact that the number of firms which pay contributions is much larger than the number which receive reimbursement.

7.2.4.2. AUD - Labour-market Training Fund

The Law concerning AUD (Arbejdsmarkedets Uddannelsesfond) was tabled as a bill on 15 November 1983 and passed on 21 December 1983. It is provided in the Law that a training fund should be established, for the purpose of financing - through contributions from employers and employees - the running expenses for labour market-training consisting of:

- an updating and refresher training scheme for skilled workers
- training for semi-skilled workers
- re-training of unskilled workers
- introductory vocational courses for young persons,EIFU
- introductory vocational courses for the chronically-unemployed, EIFL

It is provided under the Law that employees and employers who are covered by the Law concerning ATP (Labour Market

Supplementary Pension) are also covered by the AUD-scheme - i.e. both private and public employers. This will mean in practice that contributions shall be paid into the fund for all employees who have employment with the same employer for 10 or more hours weekly, or are employed as casual labour. The contrbution is graduated according to the amount of employment, the highest contribution being paid for employment of 130 hours and more monthly.

The Law came into force on 1 April 1984.

The respective employer and employee-proportions of the contributions were equal in 1984, amounting together to 27 kr. per week or 108 kr. per month or 972 kr. per year for a full-time employee.

Employer and employee contributions were equal in 1985 also. The combined amount was 18.60 kr. per week or 74.40 kr. per month or 892.80 kr. per year.

For 1986 a new provision is that the employer shall not pay for the first employee - thereby easing the burden for small firms. However, all employees must pay, regardless of the firm's size. The rates for 1986 are fixed as follows:

	amount per week	amount per month	amount per year
employer's contrib.	8.82 kr.	35.28 kr.	423.40 kr.
employee's contrib.	7.98 kr.	31.92 kr.	383.00 kr.
T o t a l	16.80 kr.	67.20 kr.	806.40 kr.

The employees' contribution shall be calculated by the employers and be withheld from each pay packet.

The employers' contribution to AUD is to be regarded as a tax deductible operating expense. In order to treat the employer and the employee equally regarding this contribution, it is provided by law that the employees' share of the AUD-contribution is deductible from taxable income.

As for the AER-scheme, collection of the contribution to the AUD-fund is to be the responsibility of the ATP (Labour Market Supplementary Pension) scheme, from which the monies are to be transferred to the training fund. The combined contribution (employees' and employers' shares) are calculated by ATP and collected at the employers' premises at the end of each quarter.

The scheme does not intend to make any changes in the existing administration of labour market training, and no formation of an actual fund as such is intended. The Lower House of Parliament still decides the level of activity for labour market training, in conjunction with the annual Budgets.

It will be necessary to adjust the size of the contributions according to the expenditure on labour market training. The Law authorizes the Minister of Labour to fix the level of contributions, one year at a time.

A financial consequence of the passing of this Law is that the national finances have been relieved of what was previously an expense item. Governmental expenditure on labour market training which was included in the Finance Bill for 1984, tabled in the Lower House in August 1983, was estimated at 1 457.9m. kr. (January 1983-level). It will be seen from table 7.1. that a total of 1 744.7m kr. was paid in in 1984; there was thus a surplus of about 295m kr. The contributions for 1985 were therefore reduced, giving for 1985 a deficit of about 275m kr., which compensated for the surplus in 1984. As mentioned above, there is no intention to set up a fund as such.
In addition, there is self-financing of running expenses for semi-skilled worker training and updating and refresher training of skilled workers, amounting to 84m kr., the discontinuance of which, as from 1984, has likewise been legislated.

For 1985, the total contribution to the fund is estimated at about 1 520m kr. The budget for 1986 is 1 460m kr.

7.2.4.3. Other training funds

In 1973, as part of the collective bargaining between the labour market-participants it was agreed that the employers should pay 1 øre per hour worked, to a training fund. The amount was increased in later bargaining - on the last occasion in 1977 to 5 øre per hour worked.

A special collecting-office is responsible for collecting the contributions from the individual employers. All firms under the Danish Employers' Association are obliged to contribute through this fund-office, and this applies also to dairies and slaughterhouses under the confederation of Agricultural Employers Associations (Landbrugets Arbejdsgiverforeninger).

The collecting-office collects the contributions twice a year and settles accounts regularly with the Trade Unions' Training Fund (Fagbevaegelsens Uddannelsesfond).

The money in the fund is used to finance course activity in the Trade Unions' Internal Training Institution (Fagbevaegelsens Interne Uddannelse), which trains primarily

shop stewards. In addition, it provides grants for training foremen and supervisors.

7.3. Administration of funds for financing

Distribution of the public funds for vocational training takes place mostly through two ministries, the Ministry of Education and the Ministry of Labour. It is important to note that the change-over of the sources of finance which took place in 1984, when labour market training changed from public financing to fund financing, does not mean that there was any change in the distributing agencies. These funds are still distributed through the Ministry of Labour.

7.4. Finance for trainees

In Denmark, most vocational training schemes are Government- or fund-financed and there are no course-fees for participants. This principle of free training should be remembered when making comparisons with the conditions for trainees in other European countries. An exception to this is certain examination courses of further training for the qualifications of 'merkonom' and 'teknonom', which receive Government grants of 84 p.c. of running costs; but the remaining 16 p.c. is paid by the participants.

7.4.1. Duty of parents to contribute

Under enabling act-promulgation No. 554 of 16 November 1976, young persons come of age when they attain their 18th birthday. Parents can in principle be obliged to pay training expenses until they are 24 years of age; but this rarely takes place in practice. In the last 15-20 years there has been a tendency for parents to contribute less and less to the financing of trainee-children - especially when the young persons pass an age-limit of about 18-20 years.

7.4.2. Assistance-facilities for trainees

The set of rules which deals with financial assistance-facilities consists of some general rules and some special rules, which vary from one course to another and increase the assistance-facilities available.

Considering the young persons' situation in general, a distinction must be made also between assistance schemes from the standpoint of training and schemes on the basis of labour market-considerations.

The financial assistance based upon labour market-considerations - e.g. for EIFU and employment projects - is greater than that offered to young persons under normal training. This creates a distorted situation in which it can be attractive financially to participate in special measures rather than to go on an actual training course.

7.4.2.1. General training assistance

The youth grant ('ungdomsydelse' - cf. Law No. 236 of 3 June 1967) is financial assistance given to young persons under training who have not attained their 18th birthday. The amount of the grant is dependent upon the parents' income-situation. No set rules exist for the allocation of youth grants. In 1984 a maximum youth grant of 9 200 kr. annually could be obtained, provided the social income of the household did not exceed 100 000 kr. a year and the youth's own income was not more than 7 000 kr. a year. The youth grant normally ceases when the youth's own income is more than 20 000 kr. annually. In 1981 about 31 p.c. of all youths aged 16-17 years received the youth grant.

Under a new tax law which comes into force on 1 January 1987, youth grants as such will cease and all youths under 18 years of age will receive a government grant of 5 000 kr. annually.

State Training-Aid (SU - cf. promulgation No.456 of 12 August 1982) is granted to young persons who are under training and have attained their 18th birthday. The assistance is given in the form of bursaries, government loans and government-guaranteed loans. Bursaries are allocated according to the income and capital of the young person, and for those seeking training who are under 22 years of age allocation depends also upon the parents'

social income. In the aid-year 1985/86 (1 August 1985 - 31 July 1986), the maximum amount for bursaries for 18-21-year-olds living at home was 15 300 kr. and for those living out it was 25 100 kr. In the aid-year 1984/85, a total of 103 700 students in the 18-24 age group received bursaries of average amount 13 200 kr.

Unemployment benefit cannot - apart from exceptions connected with special measures - be paid out to young persons under training.

Chapter 8. PROBLEMS AND TENDENCIES

> "No matter how well-designed a training system is, it cannot solve the economic structural problems of a country. But a training system can be organized to be available as one instrument among others to solve the problems."*)

8.1. Vocational training as a component of overall economic policy

Denmark continues to have some fundamental overall economic problems, namely national debt, exchange debt and unemployment. Consequently, there will continue to be a need, for a number of years, for an all-round effort to transfer resources to export-creating or import-saving activities. This transfer will make considerable demands upon the system of vocational and labour market training which is described in chapters 3 and 4, and this situation helps to emphasize the importance of reducing unemployment among young people and adults. In addition, it is important for competitiveness to provide basic training and further training in the use of new technology and in other more recent technology.

*) Quote from "Beskrivelse af erhvervsuddannelsessystemerne i Danmark" (Description of vocational training systems in Denmark) CEDEFOP, Berlin, December 1979, by Werner Rasmussen, Ministry of Education.

Training schemes in Denmark must always be adapted in a way such that they are equal to the best training schemes abroad. Moreover, the export trades need staff with good language qualifications. And the economy needs export training which combines a high technical content, a high language content and a high commercial content. It is necessary also, for opening up new export markets, to know the cultural and social circumstances of the other countries.

8.1.1. Internationalization of the training system

"On the occasion of Berlingske Tidende's 'Sell Danish' (Saelg dansk)-campaign, we asked the Minister of Education to describe the many training measures which are in progress at the present time." (Heading to the feature article quoted below.)

Extract from Education Minister Bertel Haarder's feature article in 'Berlingske Tidende' for 7 November 1985:

"TRAINING ACROSS FRONTIERS

In the publication of the Confederation of Danish Industry (Industrirådet) entitled 'Over alle graenser' (Across all frontiers) concerning the

internationalization of industry, the connection between training and the internationalization of industry is pointed out.

.....

The Ministry of Education has for a long time been adapting training towards international activity, and internationalization has high priority in the Ministry at the moment. We are going into action on many fronts at the same time, both in basic training and by supporting initiatives which are directed towards updating and refresher training and further training. The content of training which originally was not directed towards the export industries is now broader also, thereby increasing the trainees' opportunities to deal with new, non-traditional areas of work. But we have not gone far enough and are therefore continuing to support new initiatives.

.....

The need of the export industries for staff with good language qualifications and, at the same time, good economic understanding has been a guiding factor in the establishment of new training courses which combine languages and economics.

.....

Danish industry has a growing need for export training at a high technical, linguistic and commercial level.

.....

When new export markets are opened up, however, there is a need not only for technical, linguistic and sales knowledge. The need for knowledge of the other

countries' cultural and social conditions is being emphasized more and more.

.....

I also hope that research activity in general can have an inspiring effect upon the organization of courses by the institutions, towards greater internationalization.

.....

The need for more contact between training institutions and industry has run like a thread through the training-planning of the last few years. This applies also to the special requirements of the export industries, from the training system. We are trying - under the auspices of different institutions and in various forms - to enlarge the interface and to bring organizations and individuals into as many fields as possible. We are aware that exports are becoming increasingly exports of projects and large plant, in which the deliveries require co-operation between many employees with different training backgrounds. This form of exports obviously also makes special demands upon the training system - demands to the effect that the training, traditionally not 'export-orientated', must now contain elements aimed at activity beyond Denmark's borders. In short, Danish training must increasingly provide the students with international understanding and fit them for going abroad.

.....

It may certainly be appropriate here to mention some of the training schemes which have appeared in more recent years and which are directed especially towards the

export sector:

- EXPORT TECHNICAL SALES TRAINING was started in 1978 and takes place in co-operation between the technical school and the business school in Odense. The course is of four years' duration and is divided into a technical part and a commercial part. An increase in the number admitted, to 60, is planned for 1986.

- THE DANISH SCHOOL OF EXPORT is located only in Herning for the present; but the Finance Ministry's consent is being sought to establish a similar institution on Zealand, with expansion of student capacity in Herning at the same time so that the total number admitted is 100.

- Within 'MERKONOM'-TRAINING there is a special line in the export department for training 70-90 'merkonom'-students annually. Lastly, we are considering creating some combined language and commerce part-time courses aimed at the export sector.

.....

For a country such as Denmark it is important to maintain the capacity for change, - one reason being that we have no special resources other than man-made resources. I try to ensure that in the training sphere we are as progressive as possible, and firms are doing their best to see that we take advantage of the export opportunities that arise. But the effect can perhaps be

even greater if industry will be less traditional in its thinking - also when new staff are to be taken on. It will be some years before we can provide the market with the training schemes that we have been launching in the last few years. In the meantime it will be a good idea to consider whether some of the unemployed with training which initially perhaps does not appear to be relevant nevertheless have skills which will enable them to do the jobs that are vacant.

....."

8.2. Policy-requirements and initiatives

Employees' - and the whole population's - understanding of current economic problems will be decisive for motivating participation in efforts to increase competitiveness and exports.

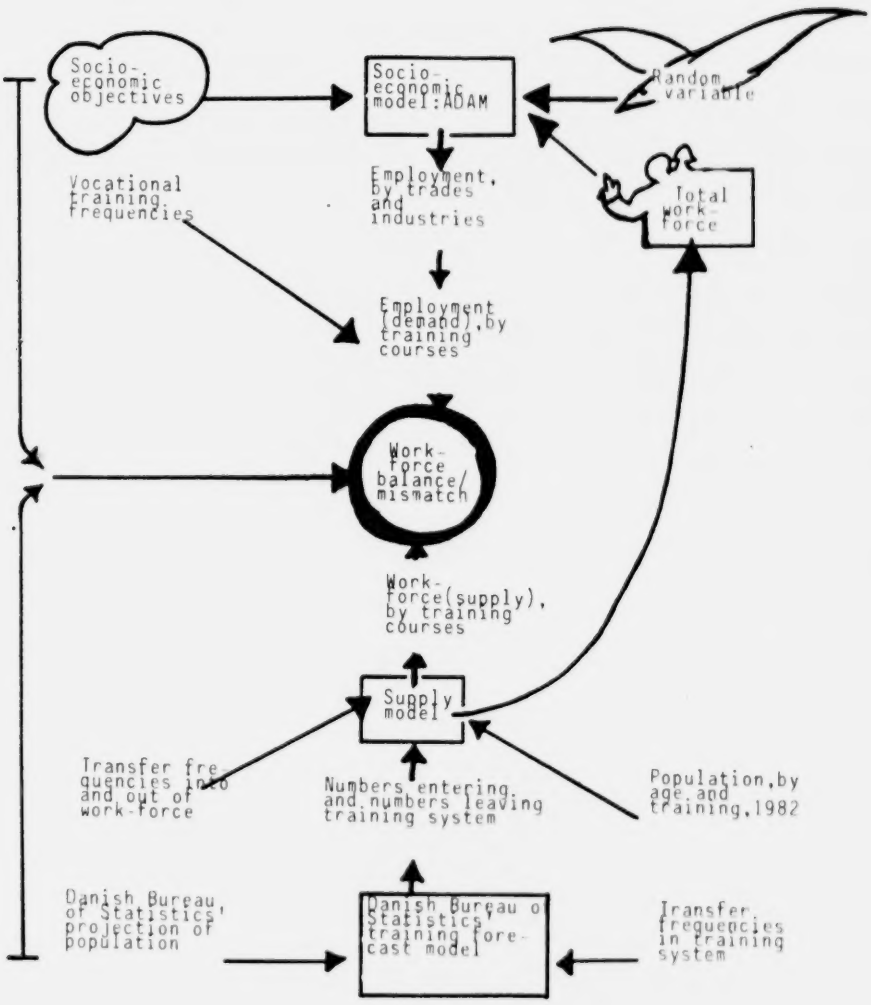
In the modernization of conditions on the labour market through intervention by the Government in the spring of 1985, one of the requirements was that a reduction of working hours should take place at the end of the 2-year period, 1985-87. A thorough debate of the effects of reducing working hours can be expected in the meantime.

At the beginning of 1984 the Ministry of Education and the

Ministry of Labour agreed to establish permanent co-operation, with a view to improving knowledge of the future labour market. In the National Planning Analysis (Perspektivrapporten) which was issued jointly in February 1985 by the two ministries, there is a detailed account of the methods. The two movements are shown in Fig. 8.1. in a comparison of supply and demand. They meet in the middle of the figure and it can be seen whether there is a balance or a mismatch. As can be seen, the basis used is ADAM and the Danish Bureau of Statistics' training forecasting-model. The idea is that a national planning report (perspektivrapport) containing the results of the calculations made of development trends on the future labour market should be drawn up and published each year. The hope is that a better basis for decision-making will be obtained thereby. The Ministry of Finance has consented to this procedure, as will be seen from the 1985 Budget report, in which the national planning report appears in detail.

Vocational training is now included as an important component of the Government's overall economic policy. The problem of balance has been taken up by the Ministry of Education and the Ministry of Labour in co-operation.

Guidance service will be expanded through more intensive use of demographic information and forecasts. The training register (see ch. 3) and the labour market-register (CRAM) (see ch. 1) are useful instruments for the Government, county labour boards (amtsarbejdsnaevnene) and trade and industry.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Socio-economic model: ADAM
Random variable
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Work-force balance/mismatch
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Numbers entering and numbers leaving training system
Population, by age and training, 1982
Danish Bureau of Statistics' projection of population
Danish Bureau of Statistics' training forecast model
Transfer frequencies in training system

Fig. 8.1. Calculation of the net position between supply of and demand for labour

8.2.1. Current problems

A more detailed evaluation of the widely-ramified system of vocational training courses is necessary:

- Does it function as intended?
- Is the preparation of new courses sufficiently thorough?
- Can stronger stimulation take place of both the activity of new businessmen (business-starters) and marketing on the export markets?
- Have basic vocational training schemes functioned as intended?
- Can they be co-ordinated with the apprentice training schemes?
- Can better guidance be given to young people in their choice of training?
- Can the chronically-unemployed be brought back into employment?
- Is there a need for more intensive research on the labour market and on vocational training?
- Should the evaluation of course modules in updating and refresher training be extended?

An overall appraisal of these problems was made in a panel discussion at Esbjerg Technical School in the autumn of 1985, as follows: *)

*) Extract from a discussion contribution by Peter Grünbaum, training consultant at the Directorate for Vocational Training, head of Teacher Training Department I (see Fig. 6.3.). 'Teknisk Skole' Nos.11/12, Nov./Dec. 1985.

"Fundamental changes are about to take place in the vocational training system. The fact that basic vocational training and apprentice training are to be co-ordinated in the very near future is not surprising; on the contrary, it will be only a start. We have today 350 different vocational training courses and the number will fall drastically, of course - with new courses appearing at the same time, it should be noted. Thus, many of the existing training schemes will disapppear in the coming years and this will probably result in co-ordination of the basic technical training schemes and skilled trade training schemes in some broad basic courses which terminate in a narrow specialism. A system of this kind will result in both geographical dispersion and geographical concentration; the individual school has only some of the special subjects, but can prepare many of the specialisms through the basic training courses.

The schools will experience other changes also. The further technical training schemes will play an increasingly important role. Now already, technician training represents 25 p.c. of the schools' activities and this figure will increase greatly. Something similar applies to updating and refresher training, which today represents about 5 p.c. of the activities, and this will increase to 20-25 p.c. A new task will be to provide tailor-made courses for local firms, This is taking place to some extent already; but it will play a very much bigger role in future. Another very important task

will probably be trade- and industry-orientated courses for foremen and supervisors, and a technical school will obviously be able to give much advisory assistance to the smaller handicraft and other firms or workshops, in particular. To give another example of changing functions, there can be no doubt that, within the next couple of years, the technical schools will have tasks to perform in connection with the immigrant-problems."

8.3. Initiatives in 1985

In chapter 2, two laws passed in June 1985 concerning labour market-conditions are discussed, which will be important for combatting unemployment.

The Minister of Education and the Minister of Labour initiated surveys, etc., in 1985 for the purpose of assessing the possibilities of modernizing and improving those parts of the systems for which they are responsible jointly and severally.

- In September 1985 the Minister of Education took the step of making a major study of the administration of the work of technical schools and business schools. One element in the background to the study is an approach made to the Minister of Education by the Association of principals of technical schools

(Sammenslutningen af ledere af tekniske skoler - SALAT), which raised some points of criticism of the present administration of the schools and proposed that a major study of this should be carried out.

The terms of reference for the study state that, for the formulation of proposals for improvements, importance should be attached especially

to ensuring sufficiently comprehensive and rapid modernization of the training schemes, including the establishment of new schemes which at any time will meet, in the best possible way, the needs of the labour market within the limits of the available resources;

to ensuring that the individual schools have an opportunity to arrange their activities effectively and with financial responsibility, and

to ensuring that the Ministry of Education has an opportunity to carry out overall financial management, including the opportunity for prompt re-adjustment and changing of priorities.

- In October 1985 the Minister of Labour took the step of making an overall appraisal of semi-skilled worker-training and of updating and refresher training for

skilled workers, etc.

- In June 1985 the two ministers decided to establish permanent co-operation regarding forecasts and administrative measures which influence recruitment to the training schemes, for the purpose of securing better adjustment between supply and demand, in both the short and the long term. (See discussion above in sub-section 8.2., including Fig. 8.1.).

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ABBREVIATIONS

AD (Arbejdsdirektoratet) State Labour Administration
ADAM Annual Danish Aggregated Model
AER (Arbejdsgivernes elevrefusion) Training grant (refund)
AF (Arbejdsformidlingen) Employment Office
ALM-G (Almengymnasiale) General Grammar School (adj.)
ATP (Arbejdsmarkedets tillægspension) Labour market supplementary pension
AUD (Arbejdsmarkedets uddannelsesfond) Labour market training fund

BNP (Bruttonationalprodukt) Gross National Product

CO-Metal (Centralorganisationen af fagforbund i jern- og metalindustrien) Federation of Metalworking Unions
CPR (Det centrale personregister) Central Registrar's Bureau
CRAM (Det centrale register for arbejdsmarkedsstatistik) Central Labour Market Statistics Bureau
CUR (Det centrale uddannelsesråd) Central Education Council

DA (Dansk Arbejdsgiverforening) Danish Employers' Federation
DAU-underskud (Underskuddet på drifts-, anlægs- og udlånsbudgettet) Deficit on the production, investment and borrowing (PIB) budget

DC (Datacentralen) State Data Registry
DIA (Danmarks Ingeniørakademi) Danish Academy of Engineers
DS (Danmarks Statistik) Danish Statistical Office
DTH (Danmarks tekniske Højskole) Danish Technical University

EF (Det europæiske fællesskab) EC (European Community)

EFG (Erhvervsfaglige grunduddannelser) Basic vocational training

EIFL (Erhvervsintroducerende kurser for langtidsledige) Introductory vocational courses for the long-term unemployed

EIFU (Erhvervsintroducerende kurser for unge) Introductory vocational courses for young persons

EKS (Eksamen) Examination

EKSF (Det europæiske kul- og stålfællesskab) ECSC (European Coal and Steel Community)

EUR (Erhvervsuddannelsesrådet) Vocational Training Council

EUU (Erhvervsuddannelsesudvalgene) Vocational Training Committees

HF (Højere forberedelseseksamen) Higher preparatory examination

HHX (Højere handelseksamen) Higher commercial examination

HTX (Højere teknisk eksamen) Higher technical examination

HKU (Handels- og kontorfagenes efteruddannelsesudvalg) Further Training Committee for Commercial Occupations

JA (Jernets Arbejdsgiverforening) Employers' Association - Metal Industry

KVU (Korte videregående uddannelser) Short further training courses

LO (Landsorganisationen) Danish Trade Union Federation

LOP (Lære- og praktikpladser) Apprenticeships and on-the-job training posts

LVU (Lange videregående uddannelser) Long further training courses

MB (Metalindustriens Brancheudvalg) Sectoral Committee - Metal Industry

ME (Metalindustriens Efteruddannelsesudvalg) Further Training Committee - Metal Industry

MVU (Mellemlange videregående uddannelser) Medium further training courses

RUE (Rådet for uddannelses- og erhvervsvejledning) Council for Vocational Training and Guidance

SALAT (Sammenslutningen af ledere af tekniske skoler) Association of Heads of Technical Schools

SEL (Statens erhvervspædagogiske Læreruddannelse) National Vocational Teacher Training Institution

SU (Statens Uddannelsesstøtte) National Training Fund

TIA (Træning i arbejdsledelse) TWI - Training within industry

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